1935.

QUEENSLAND.

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ANNUAL REPORT

OF THE

DEPARTMENT OF AGRICULTURE AND STOCK

FOR

THE YEAR 1934-1935.

PRESENTED TO PARLIAMENT BY COMMAND.

BRISBANE:
BY AUTHORITY: DAVID WHYTE, GOVERNMENT PRINTER.

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REPORT OF THE DEPARTMENT OF AGRICULTURE AND STOCK FOR THE YEAR 1934-35.

TO THE HONOURABLE THE SECRETARY FOR AGRICULTURE AND STOCK.

SIR,—I have the honour to present herewith my report for the year ended 30th June, 1935.

SEASONAL CONDITIONS.

Rainfall records for the whole year (1934-35) show that in many districts gaugings were, generally, about the average. In some parts, notably around Townsville and in the Lower Burdekin, there was, however, practically no wet season.

In the Southern Division the rainfall in July throughout the south-eastern agricultural areas was in excess of the averages for that month. August and September were very dry, and in some districts, Maranoa particularly, the rainfall was considerably below the average for these months. Lack of soil moisture and a plague of grasshoppers left little grain for harvesting throughout the Maranoa, while many late sown wheat crops on the Darling Downs had to be fed off by dairy stock. Crops that had survived the dry spell benefited by copious rains in October, as a result of which many heavy-yielding fields of prime grain were harvested. Rain in November delayed the wheat harvest, and, to some extent, depreciated the quality of the grain; but this was offset by its benefit to summer crops. December was a month of exceptionally heavy rainfall in the southern portion of the State, and in nearly every district the average precipitation was greatly exceeded. January and February were comparatively dry, with registrations well below monthly averages in most districts.

The dry weather continued more or less unbrokenly until May, when good rains fell in most of the farming areas. June has been dry, with precipitations far below average in every district.

Weather conditions in the Central and Northern Divisions were much worse, during the spring especially, and no general relief came before November. Tobacco crops were affected seriously by the continuance of these unfavourable conditions. Continuous heat and dryness in December caused considerable loss in newly-planted tobacco areas. January rains, although much below the general averages for this month, relieved the situation slightly. February was also a month of light rainfall in every district, except Mackay where the monthly average was exceeded by over 5 inches. April was even drier than February, but during May registrations were heavy for that month, and exceeded averages considerably in many places. The rain was too late, however, to be of much benefit at that time of the year, except to the the late-planted crops that had survived the unfavourable climatic conditions.

Seasonal conditions in the interior were variable. A prolonged summer heat wave and inadequate rainfall were the causes of considerable losses of stock in some of the Western areas. Early autumn rains, ranging in registrations from 3 to 9 inches, saved the situation in many of the pastoral districts.

AGRICULTURE.

Wheat.—Wheat Board deliveries totalled 3,670,000 bushels, as against 3,943,960 bushels in the previous year. It is estimated, however, that the addition of the quantities of grain retained for feed and seed purposes will bring the total yield for the year to approximately 4,000,000 bushels. The grain harvested, although not equal in quantity to that of the previous year, was superior in quality.

Wheat trial plots were established at six centres on the Darling Downs. The range of experiments covers comparisons of yields and rust-resistance observations; comparisons of yields only; and seed propagation.

There was a slight increase in area under crop in the Central Division. Lack of soil moisture was responsible for the production of somewhat pinched grain; late frosts also affected the crop adversely.

Much useful data on the suitability of various new crossbred wheats for the Central Districts were obtained from varietal trials in several localities in the Dawson Valley.

The position of the wheat industry from the commercial aspect is dealt with in my review of the operations of the Wheat Board in another section of this report.

Maize.—Where careful cultivation had been practised before the December rains, the early maize crop was fair. Late sown crops, on account of the lateness of the wet season, were not so good; while in some southern districts they failed completely.

Seasonal caprice was also against a heavy harvest on the Atherton Tableland, where an estimated harvest of 12,000 tons is in sight for silo storage.

A heavy demand for maize from western districts, in which hand feeding of sheep had become a necessity, was one of the experiences of the year, opening possibilities of closer co-ordination between the farming and grazing industries in respect of fodder for stock in seasons of parched and scanty pastures. Prices advanced with the strengthening demand, which was supplied by the Burnett and other maize-growing districts, as well as the Atherton Tableland.

Maize selection work was restricted by seasonal circumstances, but seed propagation areas were established at Kilcoy, Imbil, and Allora. Maize variety trials were also continued in different localities.

Barley.—Barley production increased and the crop gave a higher percentage of maltings. Caterpillars caused considerable loss. Comparative trials of twelve barleys were established in different localities, but results are not yet available.

Canary Seed.—Dry weather hindered growth until the October rains. Yields were light in many localities. Deliveries to the Canary Seed Board aggregated 1,281 tons of uncleaned seed,

Peanuts.—Peanut-growers achieved a record, both in area cropped and yield. From approximately 12,500 acres over 3,313 tons of nuts had been delivered to the commodity board by the end of June, when it was estimated that 900 tons were still in the field.

Potatoes.—Irish blight (*Phytophera infestans*) affected the summer crop very seriously, and only those growers who had applied preventive measures succeeded in bagging a satisfactory yield. Comparative freedom from this form of fungus attack over a series of seasons probably gave many growers a false sense of security, and the experience of the year in the districts concerned demonstrated the necessity of continuing the practice of recognised methods of disease prevention.

Comparative potato trials were carried out in several localities, and results are set out in the reports of the Senior Instructors in Agriculture. Results of two former trials are contained in the Plant Breeder's summary of experimental work, which is embodied herein.

Excellent potato crops were bagged in the Boyne and Scrubby Creek localities in the Central Division.

Sorghums.—Conditions were unsuitable for the sorghums introduced from the United States of America, Egypt, and South Africa, and submitted to trial at St. Lucia. They were placed under further trial at Swan Creek and Westbrook. At Swan Creek, dwarf-growing varieties were planted, and gave satisfactory yields, but through continuous depredations of flocks of parrots, it was impossible to obtain comparative data. At Westbrook, where tall, medium, and dwarf varieties were sown, a green bug infestation also disallowed comparison. These experiences suggest that success in grain sorghum growing is a matter of a larger scale production. Details of the trials are among the appendices hereto.

Considerable success resulted from the trials of a saccharine variety received from Italy last year, and which was placed under test in different parts of the State.

Tobacco.—Texas and Bundaberg were the only tobacco-producing districts which had a rainfall above the annual average. In most of the other districts the rainfall was far below the average.

Blue mould, hail, and frost, as well as prolonged dry periods, were among the more important crop-limiting factors in the Southern Division. In some localities in the Central Division—at Sarina particularly—heavy yields of good quality leaf were obtained. Generally, the Central Queensland crop was fairly satisfactory and of good quality. Prices that had already been received by the end of June ranged from 40d. to 45d. per lb.

Further north at Bowen, the tobacco crop was very light, and only on the irrigated areas were satisfactory returns obtained. On other tobacco lands in that district, extremely dry weather, together with serious pest attack, accounted for a very patchy yield, and quality below the usual standard of Bowen leaf.

Seasonal adversity in the Townsville district was against satisfactory yields outside irrigated fields.

At Dimbulah, there were no general rains until late in February. Careful and continuous cultivation had assisted the crop through a very trying period. In fact, it would be no exaggeration to say that the crop was saved by excellent farming methods, by which every drop of available moisture was conserved in the soil. Occasional storms, widely scattered, certainly gave timely relief in places, but it was really good farming that ensured the survival of the crop during a very severe summer. Although controlled in the seed bed, blue mould made its appearance in the field, particularly on the sandy loam country.

The area planted in the Dimbulah district approximated 1,000 acres—an average of 7 acres per grower—which is estimated to yield about 450,000 lb. A large proportion of the leaf will grade bright, showing excellent body and fine texture, of which bright mahogany will form a very high percentage.

In the Mareeba area, similar weather conditions prevailed—prolonged intervals of heat and dryness between occasional light rains and patchy storms. There, the total acreage under tobacco approximated 1,500 acres, from which it is anticipated that 150 tons (336,000 lb.) of cured saleable leaf will be picked. The quality of the Mareeba leaf is good and exceptionally free from *gercospora* leaf spot. Prices at the May sales, at which 30 tons of leaf was marketed, were regarded as good. Some half-ton lots, realised an average return of 3s. 3d.

General instructional work in every branch of the industry continued throughout the year.

Two officers of the Department were sent abroad—one, an instructor, to Africa, to study tobacco production and marketing in every aspect; and the other, a pathologist, to America to study the extensive research work on tobacco disease control conducted in that country.

The comprehensive programme of experimental work which commenced in the 1933-34 season, and to which I referred in my last report, was continued, and further extended during the year. Progressive results are assessed in attached summaries.

Although climatic conditions were responsible for serious reductions in yield in some localities, the crop results of the year were generally gratifying.

The "Tobacco Industry Protection Act of 1933," which provides for the effective control of the pests and diseases that menace the industry, was proclaimed in July. It is pleasing to report that growers appreciate this regulatory legislation, and they are, generally, cooperating with the Department in its effective administration.

Other Field Crops.—An account of instructional and experimental work performed in relation to other cereal, root and fodder crops is contained in the report of the Director of Agriculture and incorporated summaries of the field work for the year.

Pasture Improvement.—Pasture improvement work has developed into one of the most important activities of the Department. A "grass consciousness" is extending throughout all our rural communities. Graziers and farmers

generally are taking a keener interest in every project for improving the carrying capacity of their holdings, and this interest has led to better management of indigenous pastures and a wider distribution of introduced grasses.

Pasture plot work has been extended to the Northern district of the State, where until recently, there were no exotic grasses available for distribution from departmental plots further north than Townsville. Plots have been laid down on the Atherton Tableland and on the Daintree River, and results are generally satisfactory. Two grasses under trial in the Daintree district are likely to prove valuable under the conditions ruling in the far North.

Particulars of grasses under trial and the localities in which they have been established are supplied in the several reports of the instructional staff, the Government Botanist, and the Manager of the Roma State Farm, which are included in this review.

Roma State Farm.

On account of the unsuitability of the climatic conditions at Roma it has been deemed advisable to suspend operations at the State farm in that district. Arrangements have been made, however, for the continuance of wheat-breeding plots there, and these have been duplicated on the Darling Downs so that the risk of a total crop loss in any one year may be avoided.

Weather conditions at the farm during the year were against successful cropping.

Several series of manurial tests were carried out in the course of the period under review, and results are tabulated herein.

Vines did fairly well, despite general seasonal handicaps, and grapes were marketed, especially those of good carrying quality, at high prices.

Numerous rootlets of grasses grown in the propagation plots, and which display characteristics suitable for many varying conditions, were distributed to graziers and dairy farmers keen on pasture improvement. "Woolly finger" grass, and other varieties of *digitaria* were chief in popular favour, and their behaviour under widely differing circumstances is under close observation.

St. Lucia Farm School.

In the course of the year, seventy-six boys completed their training and were placed in permanent employment in rural industries.

The difficulty is to supply the demand for St. Lucia trainees, for whom many farmers show a remarkable preference. The average wage offered to trained boys has increased by 50 per cent. Contact is kept with the boys who have left the school, and it is gratifying to report that, judging by their correspondence, they are working under happy conditions and are well satisfied with their change of environment.

Three boys gained scholarships at the Queensland Agricultural High School and College at Gatton. At each examination, the examiners remarked on the excellent work of many of the candidates.

A new dormitory has been built enabling a six months' residential course to be taken, compared with the original course, which provided for half-boarding, and half-daily attendance. Many other necessary improvements were made to farm buildings and layout. All this work was done by the trainees under supervision, and all the necessary round and split timber was obtained by the boys from the forest at Moggill, where they also receive practical training in general bushcraft.

At the farm, 33 acres are under cultivation, on which cereal, root, and fodder crops are growing. Pasture improvement plots cover an area of over 6 acres. Varietal trials of sorghums, English and sweet potatoes, have increased the educational range of the school curriculum. Abundant supplies of vegetables are produced for domestic requirements. A dairy herd of thirty cows and a piggery provide a fair media of training in livestock management.

Under efficient supervision, a very healthy tone pervades the whole school. High standards are insisted on, and maintained, and the boys react splendidly to the excellent lead given.

Parents, without exception, have expressed their appreciation of the opportunity of entering on a successful country career that the School provides for their boys.

Cotton.

The expansion of the Australian market for cotton yarns as a result of tariff adjustments to meet the needs of the industry was one of the outstanding experiences of the year. The payment of bounty on lint, instead of seed cotton as formerly, was also a favourable factor in the year's development of the industry.

Weather conditions were generally favourable up to mid-January, when a record crop was in sight. Extreme dryness during the remainder of the term, however, was against a realisation of the hopes of mid-summer.

Seasonal results demonstrated the value of including cotton in the cropping system in most districts in the South-eastern portion of the State. Although the average acreage yield was not as high as for the previous year, in which conditions were more favourable, the returns show that cotton is well suited for the variable climate of the districts in which it is now established as a staple crop.

A yield of 20,765,036 lb. of seed cotton, from which 7,061,293 lb. of lint was ginned, was obtained from a cropped area of 57,000 acres by 3,194 growers.

The spinners' requirements during the first year of the operation of the new tariff schedule have been met mostly out of the crop just harvested. It is anticipated that an expansion in manufacture of some of the newly protected yarns and goods, will give rise to a demand for larger supplies. Given reasonably good seasons, there should be no difficulty in supplying an increased demand.

Generally, the average price to growers will be an improvement on the prices of the last two seasons.

Loans granted from the Cotton Production Relief Fund to finance the 1934-35 crop have been repaid to the extent of 90 per cent., and when final payments are made to growers it is probable that the percentage will be higher. This fact may be accepted as evidence of the soundness of the industry as a dry seasonal risk, particularly when it is considered that in only one of the three seasons in which advances have been made have reasonably fair yields been obtained by most of the growers who were assisted from the loan fund.

Growers generally are continuing to maintain a satisfactory standard of cultivation, and last season's results demonstrated strongly the advantage of keeping the crops well cultivated, especially early in the season. If early cultivation is neglected, weed growth will soon check the development of the cotton plants, and that means usually a serious reduction in field yield and quality. The maintenance of a high standard in field practice, which was fairly general in every district, had undoubtedly a decided effect on the final yield.

Definite evidence was obtained in all districts of the advisability of growing cotton on cultivations not more than three or four years out of the grass-land state, and also in rotation with Rhodes grass and other fodders.

Seasonal conditions again affected adversely the quality of the crop. Ample seed of the harder-bodied cottons was available for planting a large proportion of the soils of low moisture-retaining capacity, so the situation was not so bad as it might have been in the circumstances. Moreover, the dry harvesting period allowed for a satisfactory preparation of cotton suitable to spinners' requirements.

Difficulty has again been experienced with a certain amount of "light spot" in a considerable percentage of the lint of the higher grades. This is due probably to the infection of the bolls by angular leaf spot, and studies directed towards the elimination of this trouble are proceeding.

Satisfactory and reliable results were obtained from the plantings at the Cotton Research Station, Callide Valley, despite the adverse season. Previous findings in respect of crop rotation studies were confirmed, indicating that some gain in yield results in dry seasons when cotton succeeds Sudan grass, saccaline, maize, panicum, and similar fodder crops. Better results were obtained, however, when cotton was planted on land that was under cotton last year following two years of Rhodes grass.

Soil moisture studies carried out on land that has been from three to ten years in cultivation showed conclusively that the growing of cotton continuously for ten years in the same field tends to make the soil less permeable, especially by heavy beating rains.

Other results of these studies are discussed elsewhere in this report.

Stocks of seed varieties producing the classes of lint now required by Australian spinners were increased, and there will be sufficient seed in the coming season for planting on soils on which it has been demonstrated that these cottons can be grown profitably. The development of purified strains of the several promising varieties is also proceeding satisfactorily. Work has also been commenced on the more promising of recently introduced cottons.

An improvement in the position in respect of the supply of short cotton to comply with trade demands is reported.

As a result of varietal tests it is believed that eventually only a few of wide adaptability and suitability to the various climatic and soil conditions will be needed to supply spinning requirements.

Satisfactory progress has been made in field staff work, which included educational and extensional services in connection with rotational cropping.

The decision to pay bounty on lint instead of seed cotton made it necessary to alter the grading system. Before, it was the practice to segregate seed cotton into rather broad grades, according to the standards set for American Upland cotton. Under the new system the lb. of lint cotton is the unit considered in fixing the bounty. This is certainly an improvement on the old system, for it enables the grower to get something nearer the true value of his crop. It keeps grading up to a very high standard, besides securing greater uniformity in the contents of each bale of lint.

It is very satisfactory to report a remarkable freedom from insect attack throughout the cotton season. Apart from angular leaf spot, which is the probable cause of discolouration in spots of both seed cotton and lint, there is happily little to report in the nature of serious cotton diseases.

Sugar.

The Queensland cane crop for the 1934 season yielded 611,727 tons of 94 n.t. sugar. This was 26,000 tons below the record crop harvested in 1933. The reduction from the previous year was attributable largely to the substantial decrease in yields in the far Northern areas, due to the excessively wet season experienced in those parts. Though the crops from the areas south of Townsville showed an increase over those of the previous year the increased yield did not offset the Northern deficit. Of the total sugar yield, 69,659 tons constituted "excess" sugar—that is, sugar produced by certain mills in excess of their peak allotments. This quantity was disposed of at ruling export rates. The balance (542,068 tons) was marketed in the proportions—

54.664 per cent. for Australian requirements,

45.336 per cent. for sale abroad.

The proportion for export was more than 3 per cent. above that of the previous year (42.219 per cent.). This fact, coupled with the exceptionally low prices ruling on the world's market, was responsible for the low average price for No. 1 pool sugar of £16 10s. 11d., as compared with a value of £17 4s. 3d. in 1933. The average net price obtained for the entire crop, including "excess" sugar, was £15 10s. 6d., which is the lowest value recorded since 1914.

The uneconomic price offering for excess sugar induced many growers in the Central and Southern districts to standover a substantial

proportion of their 1934 crop, in preference to harvesting, and this factor has contributed largely to the estimated yield of 580,000 tons of 94 n.t. sugar for the current crop. In most areas cane yields are equal to the estimates, though the mills of the Burdekin area will not realise anticipated tonnages, due to the exceptional droughty conditions which have prevailed throughout the year. It is pleasing to record that sugar yields are uniformly high, and the June estimate should be realised. Overseas prices continue at a low figure, and in all probability the average value for No. 1 pool sugar will be but little better than that for 1934. Due to the higher sugar content of the cane, however, the value per ton to the grower should show an appreciable improvement over that of the past two seasons.

Events of the past two years afford a striking example of the difficulties surrounding any attempt by the agriculturist to regulate his crop, when he is at the mercy of climatic vagaries. In one Northern mill area—Babinda—the crops for successive years were—

1933 .. .. 260,636 tons.
1934 .. .. 133,704 tons.

The former was characterised by unusually favourable conditions, while the 1934 crop was adversely affected by excessive rains. Only where irrigation is practised consistently and efficiently can any degree of control be exercised. It is pleasing to note that increasing numbers of growers in all districts are endeavouring to exploit the water resources at their disposal, but the areas over which this is possible are decidedly limited in extent. The industry is sincere in its desire to adhere to the peak year principle, as adopted in 1929, and has expressed its intention of eliminating "excess" sugar from all areas within a limited period of years; but the many difficulties which confront any efforts along these lines will be evident when the agricultural difficulties are closely studied.

Meantime, both miller and grower are making further efforts to reduce production costs, so as to enable them to keep these costs within the limits of crop values. Each year intensive production methods become increasingly evident. The introduction of new cane varieties which possess disease-resisting qualities combined with superior yielding capacity, has resulted in a marked increase in acreage yields, notably in Southern Queensland. The expansion of the seedling propagation programme adopted by the Bureau of Sugar Experiment Stations has been productive of further promising new canes, and it is felt that this project will ensure a steady supply of superior canes in all areas. At the present time a number of these are undergoing trial against the standard varieties.

During the year a visit to Hawaii was paid by the senior assistant entomologist to the Bureau, for the purpose of studying pest control measures in that country, and to bring back to Australia a colony of giant toads. This animal is responsible for very effective beetle control in Puerto Rico and Hawaii, and it is hoped that it may effect similar results in the North Queensland areas where the grub pest is in evidence. Already several thousands of the progeny have been released in suitable locations.

The policy of building up an efficient and adequate extension service has been pursued, and a further cadet was appointed to the staff during the year. With a full field staff of six officers, the service to canegrowers will be improved very materially, while farm trial work—with both fertilizers and cane varieties—will be still further expanded, to embrace those areas which have been, of necessity partially neglected to date. The "Cane Growers' Quarterly Bulletin," which is despatched direct to every canegrower in Queensland, is proving a very useful adjunct to this work, and growers are keenly appreciative of its value.

The mill technology staff will be strengthened by the early appointment of a mill engineer, who will act in an advisory capacity to all mills, and should be able to assist the engineering staffs with their problems. The progress in milling work which has been characteristic of recent years was advanced during the past season, and increased crushing rates combined with improved recoveries have been recorded almost uniformly.

The progress results of the many projects which are at present the subject of investigation by the several branches of the Bureau will be recorded in the Director's Annual Report, which will appear later in the year.

Registration of Stallions.

The examination of stallions for the purposes of certification was carried out during the year under review in the Central Coast, Wide Bay, Burnett, East Moreton, West Moreton, Darling Downs North, Darling Downs South, and Northern Coast districts. The following is a tabulated statement of the results of these examinations:—

Board.	Bloods.			Draughts.			Trotters.			Ponies.			Total.		
	Examined.	Passed.	Rejected.	Examined.	Passed.	Rejected.	Examined.	Passed.	Rejected.	Examined.	Passed.	Rejected.	Examined.	Passed.	Rejected.
Central Coast	27	24	3	26	17	9	1	1	..	2	2	..	56	44	12
Wide Bay and Burnett ..	25	25	..	58	47	11	2	2	..	7	7	..	92	81	11
East Moreton	48	43	5	36	26	10	5	5	..	1	1	..	90	75	15
West Moreton	21	14	7	53	44	9	2	1	1	4	4	..	80	63	17
Darling Downs North ..	14	10	4	63	50	13	5	4	1	10	9	1	92	73	19
Darling Downs South ..	19	17	2	42	34	8	2	2	..	8	8	..	71	61	10
Northern Coast	17	15	2	42	30	12	1	1	..	10	10	..	70	56	14
Totals	171	148	23	320	248	72	16	16	2	42	41	1	551	453	98

PERCENTAGE OF APPROVALS.

Class.	Approved.	Rejected.
Bloods	86·5	13·5
Draughts	77·5	22·5
Trotters	88·8	11·2
Ponies	97·6	2·4
Total	82·2	17·8

REASONS FOR REJECTION OF HORSES BY THE STALLION BOARDS.

Board.	Sidebone.	Roaring.	Cataract.	Curb.	Type and Conformation.	Uni-cryptorchidism.	Stringhalt.	Ringbone.	Bone Spavin.	Total.
Central Coast	4	..	..	..	7	..	..	1	..	12
Wide Bay and Burnett	6	..	..	..	4	1	..	..	..	11
East Moreton	4	..	..	..	7	1	2	1	..	15
West Moreton	2	..	..	..	15	..	..	..	..	17
Darling Downs North	6	1	2	2	6	2	..	..	..	19
Darling Downs South	..	..	..	..	8	..	..	1	1	10
Northern Coast	5	..	..	1	8	..	..	..	..	14
Total	27	1	2	3	55	4	2	3	1	98

It is observed that the percentage of horses rejected is lower than the previous year, of which 56 per cent. represented horses lacking in type and conformation. Members of stallion boards voiced the opinion that the pedigree of sires produced shows usually a nondescript breeding on the dam's side, and that this is mainly responsible for an unnecessarily high percentage of rejections for lack of type and conformation. This appears to be so throughout all the stallion districts, farmers failing to realise that the throwing of a foal depends as much on the dam's breeding as that of the stud book sire.

A pleasing feature of the examinations during the year was the marked improvement in the better class of horse produced, which augurs well for the future of the industry.

PROTECTION OF NATIVE FAUNA.

The protection of native fauna in this State is provided for under "*The Animals and Birds Acts,* 1921 *to* 1924," and Regulations.

During the year under review it has been necessary to take action against a number of offenders who have committed breaches under the Animals and Birds Acts. The destruction of bird life on sanctuaries is deprecated strongly, and offences of this nature will be dealt with drastically.

In view of the continuation of depressed conditions on the fur market overseas it has been found desirable to apply the protective provisions of the Acts to the opossum throughout the year. As protection has now been afforded this animal for a period of four years, and propagation has been uninterrupted for that period, the opossum is now fairly plentiful in the favoured areas of the State.

It has been found necessary to check the indiscriminate export of native birds from the State, especially to New South Wales, and arrangements have been made whereby no permits are issued for the export of native fauna to that State until a license has been issued by the Chief Secretary's Office, Sydney, for the introduction of native animals or birds from Queensland. Additional sanctuaries have been established in suitable districts, in which the destruction of bird and animal life (other than pests) is absolutely prohibited.

Inspections have been made by departmental officers of aviaries established in various centres of population, and it has been noted that the conditions under which native fauna have been maintained are, in the main, satisfactory.

During the year all islands within Queensland waters, and the City of Greater Brisbane, were declared sanctuaries for native fauna, in addition to which fifteen other sanctuaries were established in the State.

PROTECTION OF NATIVE FLORA.

The conservation of our native flora is provided for under "*The Native Plants Protection Act of* 1930," and State-wide protection is afforded all species of native fern, palms, and orchids. Protective measures are enforced in forest reserves and unalienated Crown lands, and additonal honorary rangers were appointed to co-operate with the Department in the conservation of plant life in national parks.

Co-operation between the Department of Agriculture and Stock and the Main Roads Commission has resulted in the establishment of a more effective check against the destruction of our native flora.

A system whereby permits are issued by the Main Roads Commission for the removal of plants on main roads has assisted this Department materially in preventing illegal practices.

FRUIT.

Absence of early spring rains was against a full setting of fruit in most districts; and consequently the yield was lower than in the previous year. Prices were better, however.

Over-production continues to be one of the problems of the banana industry, which has approximately 20,000 acres under crop. The estimated Australian consumption is about a million cases a year. That market has to be shared with the Northern Rivers of New South Wales, where the area under bananas approximates that of Queensland. The combined production of both States approximates twice as much as the market can absorb. A marketing climax is, therefore, expected next year, when the very large plantings of recent years shall have reached a production peak. The inevitable result must be the abandonment of marginal banana lands.

To assist in alleviating the position, the Department is directing efforts towards the improvement of quality by insisting on uniform grade standards and correct ripening by modern scientific methods.

The year's returns show a decrease in pineapple production, which amounted to 812,000 cases, as against 861,000 cases in the previous year. The reduction in yield is attributed to the unfavourable seasonal conditions. Of the fruit harvested, 321,000 cases went to the processors, and 387,000 cases on to the general market. Domestic consumption accounted for 184,000 cases, and 17,000 cases were exported to New Zealand. Pineapple growing is now regarded as perhaps the soundest section of the fruit industry, due to an expanding market for the canned product. The development of a demand for Queensland canned pines in the British market was one of the achievements of the year. An assured price of 4s. a case, made possible by the assistance of the Fruit Industry Sugar Concession Committee, has acted as a stimulant to the export trade. The aggregate export value of overseas shipments of pineapples during the year was £72,462.

The improved outlook for the pineapple industry has stimulated increased plantings in the North Coast and Mary Valley districts.

The winter crop was good, and a heavy summer crop is certain.

Fertilizer plots have been established in the Mary Valley and at Woombye. The pineapple crop in the Central District and at Bowen was satisfactory, and commanded good prices. Production in the North, however, remains practically stationary.

Citrus growers are faced with the same difficulty that besets the banana growers. Efforts are being made to foster the export trade, but this involves certain transport problems that have not yet been overcome. The export guarantee provided by the Federal Government has been withdrawn and a bounty of 2s. on every 1½ bushel case of oranges exported, substituted. While this form of assistance is appreciated it is felt that the position cannot be improved substantially and permanently without an all-State marketing organisation, under which the highest export standards would be maintained and transport problems dealt with adequately and effectively.

Stanthorpe orchardists had another year of seasonal adversity. The weather conditions were largely the reverse of the extreme wet and cold of the previous season, but the effect was the same in reduced crops. Not only was the production of deciduous fruits below expectations, but it did not actually reach that of the last term. Fruit and vegetables railed from Stanthorpe and other district centres totalled 17,250 tons, compared with 20,417 tons in 1933-34. Large consignments, of course, were also despatched by road, but the railway returns are a fair reflection of the district output. Severe hailstorms and too much rain in early and mid-summer, and a prolonged dry spell from then onwards were the chief crop limiting factors. Consequently, very little fruit was available for export—8,000 cases, as against 48,000 the previous season. This was a severe set-back to the industry, but growers decided wisely not to prejudice their reputation for high export standards by consigning hail-marked and other fruit that had suffered in marketable quality.

Queensland apples opened up well on British markets, due, no doubt, to the attention given to packing, in which systematic instruction is a regular activity of the Department. In recent years there have been no serious cases of bruising.

Grades and standards for apples have been revised, and exports for the 1934 season were limited to 43 specified varieties and "plain" grade fruit was not given shipping space. Grade markings were also brought into uniformity with exports from competitive countries. Uniformity has also been sought in packing cases, but for various reasons it is not yet possible to secure it in this matter among all the apple-exporting States of the Commonwealth. Specified percentages of colour on fruit classified according to the prescribed grades have, also, been agreed to, in order to enhance the marketable value of the fruit.

Hail storms were continuous and very severe throughout the Granite Belt, damaging trees seriously, as well as destroying large quantities of fruit. Lack of sufficient rain in late summer and during autumn prevented many orchardists from making a recovery with a vegetable crop, and also from sowing green manurial crops.

Although some orchards were affected seriously by fruit fly attack, crop losses from this cause in other localities were considerably less than in former years, although the fly was in greater abundance than usual. This experience emphasises the necessity of continuing recognised control measures. Any slackening in this regard shows up inevitably in reduced returns. Trapping has been made compulsory, and in order to enforce the regulations it was necessary to increase temporarily the district inspectorial staff. In addition to trapping, many growers used the white oil and nicotine repellant with satisfactory results. The experience of the year proved that with intelligent trapping and use of repellants, and the general destruction of fly-struck fruit, the pest may be kept in check.

The codling moth was not so much in evidence as in previous years; and aphides were also scarcer. There was comparatively little disease in the deciduous fruit orchards. Irish blight made no appearance, and powdery mil-

dew is now under control. Brown rot of stone fruits, however, was serious in its occurrence, and this disease, together with plum spot and "little leaf" (or "rosette") of the apple are, apart from the fruit fly, at present the major problems of the deciduous fruit growing districts.

The marketing of immature fruit is still practised by some growers to the general detriment of the industry, the conscientious orchardist suffering with the conscienceless.

Considerable progress was made with root stock work. Of the six East Malling apple stocks imported in 1934, three are showing promise. Stocks raised vegetatively from selected local seedlings are also under test, and at present it is probable that a stock or stocks equal or superior to the East Malling varieties will be obtained from local sources.

There is an increasing demand on the services of the Department in regard to instruction in the selection of trees, pruning, grafting, packing and general orchard management.

Vignerons had the best vintage for years. Black spot made its appearance on the vines early in the season, but subsequent weather conditions checked its progress, and damage among the more susceptible varieties was restricted to canes and foliage. Other vine diseases also gave little trouble, and only where there was laxity in applying the usual measures of control. The question of exporting a surplus did not rise, as the home market was not oversupplied and prices generally were satisfactory. Small trial shipments were made, however, for experimental purposes. The importance of studying the possibilities of the export market for grapes has, therefore, not been lost sight of. The conversion of old stone fruit orchards to vine growing between Stanthorpe and the border, and other evidence of expansion, makes it necessary to consider every outlet for crop disposal. It is still the practice of some growers to market immature grapes, regardless of its effect on public demand. This practice is obviously against the interests of the industry as a whole, and, therefore, cannot be condemned too strongly.

In many of the citrus producing districts, a dry spring caused a light setting of fruit, and hail damage was common during the summer. Orchards in favourable situations, and cultivated systematically with a plentiful supply of plant foods, carried good crops. The price factor, however, is a severe handicap in every district, limiting, for economical reasons, general field work in which heavy costs other than labour are involved.

Among citrus fruits fungus diseases were prevalent, but not so severely as last year, and that applies also to scale pests. There were some losses from fruit fly attack.

The summer lemon crop was of excellent quality, and realised satisfactory prices. Storage trials with winter lemons, under departmental supervision, indicate that the practice is sound commercially.

The citrus budwood scheme, designed for the standardisation and improvement of the quality of citrus fruits in Queensland, is proving remarkably successful. During the year 85,470 selected buds and about 100 lb. of selected orange and rough lemon seed were supplied to nurserymen. General commendation has now displaced the open hostility with which this progressive scheme was regarded when first introduced. It is interesting to note that the Commonwealth Citrus Investigation Committee favours action by every State in controlling the distribution of citrus trees from nurseries.

In the Central district the fruit growing industry is expanding gradually, and a wide range of fruits, chiefly tropical, is under cultivation. Some sub-districts, notably Byfield, have already won a high reputation for the quality of their citrus products.

In some places there is evidence of non-observance of the principles of sound orchard practice, and attention is being given to an improvement in methods of cultivation, fertilizing and marketing where such a need exists.

There is a developing market for pineapples produced around St. Lawrence, along the northern railway.

Tomato growers had a successful season in most districts. Blight was one of the main crop limiting factors, but where early spraying was done losses were light. Bowen sent away 132,929 cases, about the same quantity as last year. Prices generally were better than in recent years.

Every effort to improve the popularity of mangoes in the Southern States is proving worth while. Growers are urged to select only the best varieties for propagation, a very important point for consideration if this trade is to expand.

In the northern district a good citrus crop was harvested.

The fruit packing and marketing services of the Department were extended in many directions. Classes of instruction for both adults and children were continued. Packing charts and pamphlets were widely distributed; market and cold storage inspections, on which was based advice to growers and selling agents for the better handling of fruit were numerous; storage experiments and fruit case improvement studies were all included in the year's work of the Fruit Branch.

General experimental work, an account of which is given herein, was also carried out to the general benefit of the fruit-growing industry. The value of these and other departmental activities is reflected in higher cultural standards and better marketing methods.

Rail and port inspections were carried out systematically, and, as shown in the attached tables, the trade balance was in favour of this State. Exports included:—419,670 cases; passion fruit, 5,958 cases; citrus fruits, 6,929 cases; pineapples, 302,722 cases; tomatoes, 373,281 cases; strawberries, 9,389 trays; grapes, 8,756 cases; mangoes, 6,911 cases; egg fruit, 1,393 cases; miscellaneous fruits, 99,272 cases. Fruit imports totalled 924,567 cases.

EXPORTS AND IMPORTS FOR QUEENSLAND—YEAR ENDING 30TH JUNE, 1935.

INTERSTATE EXPORTS.

—	Fruit. Bananas.	Passions.	Citrus.	Pines.	Tomatoes.	Strawberries.	Grapes.	Mangoes	Egg Fruit.	Various Fruits.	Melons.	Seeds. Bird-seed.	Plants.	Coffee.
	Cases.	Cases.	Cases.	Cases.	Cases.	Trays.	Cases.	Cases.	Cases.	Cases.	Bags	Bags.	Packages.	Bags.
Brisbane	9,075	70	1,041	27,766	2,138	..	..	76	1,061	1,896	1,177	48,855	3	34
Clapham	406,761	5,646	6,261	271,853	335,226	9,364	3,175	6,705	324	80,683	618	1,419	276	..
Wallangarra	3,834	242	132	3,103	35,197	25	5,581	130	8	16,693	253	155,379	95	..
Rockhampton	14	50	54	544	3,738	..	..	112	..	5	..	..	..	..
Bowen	..	..	1	8,069	141,355	..	..	5,561	1,061	10	120	..	..	..
Townsville	..	..	..	4,588	..	..	..	..	..	3,780	..	..	..	..
Innisfail	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cairns	1	..	..	2	..	..	..	8	..	4	..	..	3	..
Totals	419,670	5,958	6,929	302,722	373,281	9,389	8,756	6,911	1,393	99,272	2,048	205,653	374	34

NOTE.—Totals made up Brisbane, Clapham, and Wallangarra only.

—	Produce. Pumpkins.	Potatoes.	Maize.	Onions.	Peanuts.	Arrowroot.	Ginger.	Tobacco.	Coconuts.	Cane.	Cucumbers.	Chillies.	Vegetables.
	Bags.	Bags.	Bags.	Bags.	Bags.	Bags.	Bags.	Packages.	Bags.	Packages.	Cases.	Packages.	Packages.
Brisbane	52,773	17,633	60,668	9,480	56,926	8,835	18	4,741	..	..	14,005	10	10,779
Clapham	42,704	634	14,927	2,056	275	617	357	25	11	111	24,110	495	86,312
Wallangarra	5,802	1,162	176,022	152	47	..	2	..	14	..	943	..	14,809
Rockhampton	..	..	..	..	280	..	..	..	..	..	..	..	1
Bowen	4,595	..	..	..	..	..	..	..	..	..	7,293	430	..
Townsville	..	..	..	..	..	..	..	..	..	..	..	..	..
Innisfail	..	..	..	..	..	..	..	..	..	..	..	..	..
Cairns	..	..	..	..	3,239	..	..	2,288	..	..	..	..	1
Totals	101,279	19,429	251,617	11,688	57,248	9,452	357	4,766	25	111	39,058	505	111,900

INTERSTATE IMPORTS.

—	Fruit.	Potatoes.	Vegetables	Plants.	Onions.	Nuts.	Garlic.	Swedes.	Seeds.	Grapes.	Tomatoes.	Tobacco.
	Cases.	Bags.	Packages.	Packages.	Bags.	Packages.	Bags.	Bags.	Packages.	Cases.	Cases.	Packages.
Brisbane	582,093	134,326	4,251	5,703	37,424	132	..	11,968	..	..	..	..
Clapham	226,606	23,177	71	248	181	64	184	..	929	2,832	800	..
Wallangarra	115,868	48,693	9,935	653	2,969	11	..	..	1,570	41	333	111
Rockhampton	812	13,438	685	20	7,370	..	..	..	..	..	..	..
Bowen	14	3,537	..	5	1,353	3	..	..	1	..	..	..
Townsville	38,229	26,518	1,652	41	13,058	132	..	..	..	..	..	..
Cairns	30,598	23,368	1,557	27	7,769	..	..	485	200	..	..	..
Totals	924,567	206,196	14,257	6,604	40,574	207	184	11,968	2,499	2,873	1,133	111

NOTE—.Totals made up of Brisbane, Clapham, and Wallangarra only.

IMPORTS—QUARANTINE ACT.

General Packages.	Timber. (Logs.)	Staves. (Bundles.)	Rattans (Bundles.)	Timber. (Super feet.)
45,774	1,086	126,947	2,908	2,250,162

Plants. (Bundles.)	Timber. (Packages.)	Bamboo. (Bundles.)	Split Cane. (Bundles.)	Spokes. (Bundles.)
249	9,760	60	94	2,549

Herbs. (Bundles.)	Wood Wool. (Bales.)	Skewers. (Bundles.)	Parcel Post. (Packages.)	——
126	160	80	561	..

EXPORTS—COMMERCE ACT.

Fruit. (Cases.)	Plants. (Packages.)	Vegetables. (Cases.)	Seed. (Packages.)	Rice. (Bags.)
15,229	5	96	6,666	100

A. PERSON, Senior Plants Inspector.

Banana Industry Protection Board.

The supervision of banana-growing was continued satisfactorily by the Banana Industry Protection Board. Bunchy top, as a result of effective control measures, has made no further movement northward, and intensive inspection in the quarantine area is being maintained. Precautions against the spread of Thrips (*Scirtothrips singnipennis* Bagn.) to districts in which its presence has not yet been reported, are proving effective.

During the planting season just over 900 permits, covering approximately 912,000 suckers, were issued. From those figures it is deduced that the total planting will not be a fourth of that of the preceding year.

Approximately 4,500 acres of bananas were eradicated or in the process of eradication, for the reason that the plantations had ceased profitable production. The eradication of banana plants from neglected and unprofitable banana plantations, aggregating a very large acreage, is planned for the coming year. Potential breeding grounds for plant diseases will thus be removed.

Dairying.

Another record was established in dairy production during the year just closed. The actual butter factory output was 130,233,768 lb., compared with 123,918,257 lb. in the previous year.

Approximately 75 per cent. of the butter manufactured in Queensland was exported, the British market absorbing practically the whole of the export quota.

The industry had another year of good dairying weather, and to the generally favourable seasonal circumstances the great increase in production is largely due. Other contributing factors were the extension of dairying in new and hitherto undeveloped country, and the attraction that regular monthly payments have for arable and grass farmers faced with diminishing returns for other crops and beef stock.

The operation of the Stabilisation Scheme enabled factories to maintain satisfactory pays. Prices on the export market were practically the same as in the previous year. For a brief period London values rose to 80s. per cwt., but they fell to an average price of 75s.—the price received for the first shipment of butter from Queensland in 1895. Danish butter still commands much higher prices than Australian, particularly during the winter season. The margin diminishes, however, during their summer flush—an indication that continuity of supply must always remain a potent factor in our market stability.

Grading returns show a slight improvement in quality. Choice butter constituted 31·5 per cent. of the gradings; first, 59·5 per cent.; second, 7·4 per cent.; and third, 1·6 per cent.

The improvement in the character of the butter, on which I remarked in my last report, has been maintained. Although from a manufacturing standpoint the position may be regarded as satisfactory, there is ample evidence that greater attention must be paid to the quality of the raw material. A factory must receive good cream if it is to turn out good butter.

The check on the quality of butter sold on the metropolitan market has been maintained, and examinations disclosed a slight improvement on the standard of previous years.

The cheese output was 12,185,276 lb., as against 13,881,766 lb. in the previous year. The quality of cheese submitted for export early in the season was poor, but an appreciable improvement was noticeable before the export season closed. It has been observed that white cheeses have been graded better than coloured, and the cause of this difference is now under investigation.

Serious attention is being given to the question of the quality of raw material, especially in the butter industry, and to this end the Department is co-operating wholeheartedly with dairy factory organisations.

Much good work has been accomplished by the research workers of the Department. With the projected opening of the new dairy science laboratory, and a staff of bacteriologists working solely on dairy products, it is anticipated that a general improvement in quality will be reported at the end of the coming year.

Dairy science schools, at which short but intensive refresher courses of instruction were provided for factory operatives, were held in some of the chief dairying centres. They were attended largely, and proved generally a valuable expansion of the instructional services of the Dairy Branch.

The rail freight rebate scheme has done much to impress dairy farmers with the advantages of breeding along production lines.

While the number of cows submitted to test during the year was somewhat lower than that recorded last year, the work has probably been more effective, for a greater number of tests for the full lactation period has been completed. Although this service is free, the small percentage of dairy farmers who take advantage of it is remarkable. In spite of this astonishing apathy the work has increased considerably since the testing service was inaugurated.

As a result of legislation relating to the payment of over-run, uniform financial statements, now in use by all companies, present the business of each association in a form appreciated readily by the shareholding suppliers.

The educational activities inaugurated under the Dairy Cattle Improvement Act have been continued. Dairy committees have co-operated in the scheme with enthusiasm, and the organised field days have proved very successful. Dairy economics, science, and veterinary practice are comprised in the programmes arranged. The practical field demonstrations have a strong appeal to farmers, and this form of educational effort is obviously appreciated.

In accordance with the decentralisation policy of the Department, veterinary surgeons have been stationed at Toowoomba, Rockhampton, and Atherton, and these officers are concerned primarily with the health of dairy cattle in those districts.

The marketing of dairy products is dealt with in detail in my report as Director of Marketing.

A general account of the work of the Dairy Branch—covering herd testing and recording, butter and cheese grading, chemistry, bacteriology, and factory accountancy—are included among the sectional summaries embodied in this general report.

Pig Raising.

Bacon and ham production was practically the same as in the previous year—approximately 20,000,000 lb. Bacon factories number eight, employing 526 people. Land and buildings used by the industry approximate £177,655, and machinery and plant £97,924 in value. Wages paid amounted to £115,516, and the total value of the output was approximately £947,895.

Feeding tests were carried out at the Animal Health Station, at Yeerongpilly, during the year. Results are set out fully in appended reports.

Experiments were also carried out with various devices for the identification of pigs consigned for slaughter, but they had not advanced sufficiently at the close of the year to warrant the publication of results.

Berkshires, Middle Whites, Large Whites, and Tamworths predominate in stud pig registrations.

The increased attention given to investigation of the incidence of disease in pigs in recent years has resulted in an appreciable reduction in condemnations at places of slaughter, and in the number affected by serious disorders.

Conditions under which pigs are kept, in housing and paddocking particularly, have improved. No serious epidemic diseases have been reported.

In the course of the year prices reached the highest point since 1930; this led naturally to a keener interest in the industry, and the demand on instructional services was, consequently, much greater. To cope with this demand additional advisory literature was distributed, correspondence courses were revised and brought up to date, and field work, including regular farm visitations and demonstrations, extended.

There exists now a better understanding by stud pig breeders of the classes of pigs required, and of the necessity of standardising breed types.

In order to focus the attention of stud masters on utility factors in this branch of animal husbandry, many have been induced to record pig litters under departmental supervision. The usefulness of this work is illustrated by an accompanying table of results.

Housing and accommodation of pigs on the farm, and general piggery management, were among the major instructional activities of a very busy year.

Poultry.

Oversea export of eggs reached the record total of 1,944,810 dozen, as compared with the previous year's exports of 1,458,480 dozen. Egg Board receivals in 1934 totalled 4,718,907 dozen, as compared with 3,985,000 dozen in 1933, an increase of 733,907 dozen. Of this increase 486,330 dozen were shipped abroad and 128,194 went into local consumption, leaving a balance of 129,383 for disposal otherwise.

The position of the poultry industry now is that unless home consumption is increased further expansion may mean hardship for those already established in the industry. The economical aspect is amplified in another portion of this report.

The pulping of eggs for the local trade is an increasing practice, and the product has been pronounced of uniformly high quality. A small quantity was exported, but returns have not yet been received.

The possibility of building up an export trade in dressed table poultry is under investigation.

Considerable research into disease and nutritional problems was carried out in co-operation with the Animal Health Station in the course of the year, and details are set out further on in this report.

Instructional activities covered a wide range during the year, and included, besides individual instruction, field days and regular lectures, both personally and by radio. Numerous advisory leaflets were also issued.

Fowl-pox, formerly a widely prevalent disorder of annual occurrence, is now controlled by inoculation, and considerable advances have been made in the control of other diseases of poultry.

It is pleasing to report that the commercial poultry farmer now appreciates in a greater degree the necessity of maintaining a healthy and vigorous flock.

Bee-keeping.

The bee-keeping advisory and inspectional work continues to be performed by an officer of the Entomological Branch. Apiaries inspected numbered 208. It is pleasing to record the fact that apiaries in Queensland remain free from foulbrood. A comprehensive advisory bulletin on bee-keeping was published by the Department in the course of the year.

Economic Botany.

Native grasses, fodders, and edible shrubs were among the main subjects of botanical research studies and field investigations in the course of the year. Many cases of mortality among stock, caused presumably by poisonous plants, were also investigated closely. Useful notes on the individual plants observed are set out at length in the report of the Government Botanist, incorporated herein.

Pastoralists, farmers, and others interested in indigenous and introduced plants and their economic value are taking advantage of the botanical service available to them in far greater number than hitherto. This service includes the identification of specimens submitted and the dissemination of information on the means and methods of controllling or eradicating vegetable pests.

Further observations of experiments in laying down Mitchell and Flinders grasses as possible permanent pastures on a property in the Goondiwindi district were made. On one of the chief experimental plots the Mitchell grass proved particularly attractive to stock. In spite of heavy feeding-down the Mitchell grass clumps increased in girth, showing that, if given a chance, this grass will thrive in places away from its natural habitat. It would seem,

however, that in the districts into which it is introduced, unless allowed to recuperate after heavy stocking, there is a risk of its being eaten right out. These observations are interesting, as they upset an idea common in some "inside" districts that Mitchell grass is not particularly palatable, and that stock only eat it in the absence of other feed. On the property referred to, the stock have shown a decided preference for it above all the other grasses available. Experiments with Flinders and Woolly Finger (*Digitaria eriantha*) grasses are also in progress on the same property, and are all showing promise.

The fact that most of the wealth of the State is derived from grass has stimulated more extensive studies of pasture problems on which a number of officers of the Department are now specially engaged.

Economic Entomology and Plant Pathology.

The outstanding entomological problem of the year with which the Department had to deal was the widespread occurrence of the plague grasshopper in parts of Southern Queensland. The problem was tackled energetically in the fields of infestation. A large scale baiting campaign was organised, as a result of which myriads of hoppers were destroyed. By this form of direct attack, assisted by the presence of natural enemies of the pest, the invasion was checked.

The white grub and grass grub constitute a problem of major importance in paspalum paddocks on the Atherton Tableland. In following the lines of investigation indicated in my last report, much valuable information has been accumulated. A tentative scheme of comprehensive field experiments, largely of an agricultural nature and designed to discover effective means of combating these pests, has been drawn up.

Large scale seed-bed experiments were initiated at Mareeba to determine whether or not seed-bed infestation of leaf miner and stem borer of tobacco could be controlled by spraying and dusting. These experiments demonstrated the value of colloidal copper and copper emulsion sprays, which are used in the control of blue mould of tobacco, in keeping tobacco seedlings reasonably free from infestation.

The cotton industry is still faced with the serious corn-ear worm problem. Although certain measures of value in attacking this pest are already available, continued investigational work is necessary and has been planned accordingly.

Many other research projects engaged the attention of the entomological and pathological staff in the course of the year. In addition to those already mentioned, chief among the subjects of study and investigation were the green vegetable bug, potato tuber moth, peanut pests, grape vine mealy bug, citrus root channeller, citrus leaf-eating weevil, citrus foliocellosis, banana thrips, noogoora burr seed fly, pin-hole borer and other forestry pests.

A new citrus pest was discovered in banana thrips (*Scirtothrips signipennis* Bagnall), which was found breeding on citrus fruits in a coastal orchard. Orange skins were disfigured considerably by the feeding thrips in all stages of development, but mandarin infestation was light.

Considerable progress was made with many pathological research projects. A new field station has been opened at Rockhampton. Advisory work is increasing in volume. Publications dealing with vegetable pests and diseases issued in the course of the year numbered twenty-two. In addition, much other advisory matter was supplied to the daily and country Press. A special series of short, simply-worded leaflets covering many matters of every-day inquiry is now available to farmers.

The research activities of the Department, both fundamental and applied, are described in detail in accompanying accounts of the year's work.

Agricultural Chemistry.

There was a further increase in the analytical work of the department during the year. Chemical analyses numbered 8,385, as against 6,797 in the previous year. In addition, 5,805 samples of glassware were tested, as compared with 7,422 for the 1933-34 period.

Soil analyses have also increased in volume, especially in relation to variations in crop growth. Altogether 2,249 samples of soil were tested to determine their chemical composition, as compared with 1,000 the previous year.

Fewer grass samples were submitted for analysis, and they were sent in mostly for the purpose of ascertaining what concentrates, supplementary feeds, and stock licks were required in addition to roughage to keep stock alive. A matter of special interest is a report that stock grazing on "sensitive plant" (*Mimosa pudica*), which has a big protein content, and a little wild lucerne (*Stylosanthes mucronata*) maintained excellent condition.

Among new lines of investigation were experiments in connection with the sawfly trouble in one of our cattle districts. These experiments were designed to ascertain if phosphorus or protein deficiency is a cause of what is regarded as a depraved taste in stock eating sawfly larvæ. The non-appearance of the sawfly and failure of the grass crop in the experimental paddock nullified, to some extent, the experiments, which, however, are being continued in anticipation of the occurrence of circumstances favourable to the success of the investigation.

The Experimentation Committee, consisting of officers of the Department, and which was formed for the purpose of ensuring closer collaboration among the several branches of the Department and local producers' associations in the investigation of any particular problem in any portion of the State, has already proved its value. Under its auspices fifty experiments have been initiated in coastal districts as far north as Mackay and in some of the nearer inland districts. A wide range of climate and soil types is thus covered by the Committee's investigations, which include crop varietal tests, fertilizer trials, green manuring, the suitability of certain winter grasses and fodders, soil erosion control, and drainage.

Other important and special analytical work in relation to the activities of the Pasture Improvement Committee and the Veterinary

Medicines Board is detailed in an incorporated report, in which are also tabulated complete details of the year's laboratory and field activities.

Seeds, Stock Foods, Fertilizers, Pest Destroyers, and Veterinary Medicines.

Details of the general work of this Branch during the period under review are set out in a series of tables and explanatory text in another section of this report.

Live Stock.

The statistical position in relation to live stock in Queensland indicates a substantial increase of cattle and sheep, and a decrease of more than 10,000 horses. The numbers of station and farm stock on 1st January, 1935 (1934 figures in parenthesis) were:—Horses, 439,606 (450,024); beef cattle, 5,113,387; dairy cattle, 939,254; sheep, 21,574,182 (20,072,804); pigs, 269,873.

These figures may be regarded as a fulfilment of a forecast in my last report that totals later than those then given would reflect a general improvement in seasonal conditions in 1934 over a large extent of our pastoral country.

Since my last report, however, dry weather, although broken by useful rains in some regions, has been generally prevalent over a large proportion of our western lands. Losses among sheep have been consequently very severe in some grazing districts, and would have been much greater but for the fact that it was possible to remove large numbers to relief country in the more favoured parts of the State. As a result, lambing figures are below average. Hand feeding, always expensive, was also a factor in preventing further losses, especially among breeding stock. The Railway Department, by facilitating transport and reducing freight charges, contributed materially to the easement of the situation.

A regrettable decline in horse-breeding, especially for draught animals for farm work, is revealed in the figures given. It is not easy to account for this, for, apart from adverse seasonal conditions in some districts, the demand for working horses of the right classes and types is constant. Although there has been no marked development in the export market, the fact still remains that there is an oversea demand for Australian horses, for both remount and transport purposes, and graziers with suitable country would be well advised to give close attention to this important branch of animal husbandry.

While mechanical traction has become a necessity on many of the bigger farms, on which large-scale field operations often involve a race against time, many farmers are finding that on the smaller holdings draught animal power is, in ordinary circumstances, the more economical. For this reason alone, the market for suitable horses is certain to remain firm.

In this connection some attention is being given to mule-breeding, and the Department has co-operated with a small number of cane-growers in the importation from the United States of three jack donkeys for this purpose. It is believed that the mule will stand the hard field conditions of summer cultivation, especially in the far Northern sugar areas, better than the horse.

Horses shipped oversea in the course of the year numbered 2,337.

The Stallion Boards are continuing to do good work in promoting higher standards in horse-breeding.

A careful survey of previously infested and suspected holdings has shown that the buffalo fly—which three years ago threatened to become a serious menace to Queensland herds—is now confined to only two properties contiguous to the eastern border of North Australia, and on which the occurrence of the fly was originally observed. While climatic conditions had, no doubt, some influence in checking the invasion of the pest, the active co-operation of Commonwealth and State Governments in devising and applying measures of control—biological, mechanical, and administrative—was also an important factor.

The value of tick-cleansing areas as buffer zones was again demonstrated during the year. In the South Burnett approximately 800 square miles are included in the range of operations, and of this area about a third is free from ticks and another third is practically free, while in the remainder only a few properties are at present tick-infested. The Darling Downs area has been extended to ensure further protection, and the Helidon and Crow's Nest areas have been merged, making an approximate area of 1,900 square miles, of which 1,400 square miles are reported free from ticks.

The number of dipping fluids analysed in the course of the year was 2,337.

The tuberculin test was applied to 2,071 animals, as compared with 832 for the previous year.

It is pleasing to report a comparative freedom from serious animal diseases, and in this regard, Queensland continues to maintain a reputation for being one of the healthiest stock countries in the world.

The table of stock movements contained in an incorporated report is very interesting, as showing how seriously several pastoral districts have been affected by seasonal adversity; but it gives also an indication of the extent of the relief country available—evidence of an abundance of grass and water over a large proportion of the State.

Metropolitan fat stock yardings at Cannon Hill included 130,678 beef cattle, 33,977 vealers, 561,423 sheep, 59,458 lambs, and 35,314 swine. The total number of stock sold up to 30th June was 820,850, as compared with 710,588 in 1933-34, an increase of 110,262.

Average values were:—

Cattle—

Bullocks, per cental 20s. 11d.; per head, —£6 0s. 5d.

Cows, per cental 18s. 1d.; per head, £3 16s. 1d.

Vealers, per lb., 2.45d.

Sheep—

Wethers, per lb., 3.06d.

Ewes, per lb., 2.69d.

Lambs, per lb., 5.56d.

Pigs—

Porkers and Baconers, per lb., 5.26d.

Metropolitan killings (Brisbane Abattoir) (totals for previous year shown in parenthesis):—Bullocks, 53,617 (47,406); cows, 39,220 (46,313); calves, 52,187 (48,012); sheep and lambs, 406,499 (441,792); pigs, 30,305 (35,364).

Abattoir condemnations which were comparatively light are tabulated herein.

Slaughtering and meat distribution has been subject to constant supervision, and observance of regulations has been generally satisfactory. The lay-out and equipment of butcher shops, including installation of new refrigerators, are improving steadily; and, in the case of new premises, modern ideas have been adopted, in respect of the hygienic handling of meat particularly. Outside the metropolitan area, butcher shops now number 825, and slaughterhouses 624. Inspections of shops and vehicles numbered 10,405 for the year. The standards required by legislation have been well maintained, although in some districts there is considerable room for improvement. Continual vigilance is still necessary to prevent illegal slaughtering. Metropolitan registrations of shops and vehicles for the year were (totals for previous year are shown in parenthesis):—Shops, 322 (291); vehicles, 389 (402); cutting carts, 112 (95).

Bacon factory slaughterings were:—Pigs, 324,107 (250,688). Condemnations: Carcases, 3,354 (2,720); heads, 24,869 (14,702). Cattle: Bullocks, 2,438; cows, 11,615; calves, 4,132.

The numbers of stock slaughtered in country districts under police supervision were:—Bullocks, 40,449; cows, 48,327; calves, 2,834; sheep, 101,456; pigs, 17,172.

The Veterinary Medicines Act in its second year of operation proved of considerable benefit to stock-owners, manufacturers, and vendors alike, and has been the means of preventing the sale of useless and often harmful specifics (so-called) for the treatment of stock ailments and diseases.

For many years Queensland has held the premier position among the States of the Commonwealth in beef cattle raising. In addition to the supply of domestic meat requirements, a large number of cattle is treated for the frozen and chilled beef export trade, and also for the interstate trade.

The raising of crossbred sheep for the mutton and lamb trade is not yet an extensive practice in Queensland. Through the fat lamb scheme and other appropriate means, the Department is giving every assistance to this branch of animal husbandry, and results so far are encouraging.

The export figures for all classes of meat reveal how Queensland compares with the other States of the Commonwealth on a percentage basis. Of the total exports to the United Kingdom, Queensland contributes 54·859 per cent. The respective percentage of exports to other countries were:—Queensland, 74·274 per cent.; all other States, 25·726 per cent. The actual trade volume was:—Exports to the United Kingdom: Queensland, 1,617,096 cwt.; all other Australian States, 1,965,227 cwt. Exports to other countries:—Queensland, 150,108 cwt.; all other Australian States, 51,991 cwt. Total meat exports:—Queensland, 1,767,204 cwt.; all other Australian States, 2,017,218 cwt. The respective percentages were: Queensland, 46·697 per cent.; all other Australian States, 53·303 per cent. Queensland's contribution, therefore, approaches half of the total meat exports of the whole Commonwealth.

During the year the total quantity of chilled beef prepared at the Brisbane Abattoir and shipped to England was approximately 3,589 tons, made up of 34,277 hinds and 17,228 crops.

Investigations into the problems of the oversea marketing of chilled beef have been continued throughout the year by the Commonwealth Council of Scientific and Industrial Research in collaboration with the Meat Industry Board and the Department at the Brisbane Abattoir. Certain aspects of the experiments which are being undertaken have been advanced considerably. These experiments have, so far, been confined to the laboratory (vide report of the Meat Industry Board), but it is expected that they will be conducted on a semi-commercial scale within a reasonably short period.

Investigations into pathological breeding and nutritional problems have been continued at the Animal Health Station, Yeerongpilly, with the co-operation of the Meat Industry Board.

The Department is associated with the Board also in planning special technical and instructional work for the benefit of cattle and lamb production. Included within the scope of the work proposed to be undertaken by the Department, in association with the committee appointed specially to co-operate with it, are the questions of animal diseases, pasture improvement, correct feeding of stock, distribution of seeds, grasses, and edible shrubs, the eradication of poisonous plants, and other relevant matters.

Prospects for meat production are promising. Although stocks of imported lamb in cold storage in England reached record figures, the price position remained fairly stable. Good quality lamb production should continue to be a profitable business, with plenty of scope for expansion in Queensland.

In regard to exports of quarter beef to Britain, the following figures are interesting:—Empire countries, 1,689,300 quarters; South America (Argentine), 5,219,314 quarters. This year the export of chilled quarters to the United Kingdom will consist of 350,000 quarters from Empire countries, and about 5,200,000 quarters from South America.

The development of chilling processes has, apparently, made such progress as to cause a difficult problem in the marketing of dominions' beef in Britain, due to irregularity of arrival of dominions' product, and to the fact that, for the time being, shipments from foreign countries supply, almost entirely, the chilled beef requirements of the British markets. An equitable division of the trade and co-ordination in transport would, seemingly, offer a solution of the problem.

Although the scientific difficulties which have impeded the transition from frozen to chilled beef production have largely been overcome, the economic difficulties remain. The more careful handling of stock and the marketing of younger and better quality cattle are obvious means of surmounting them.

The possibility of developing new markets for meat in countries other than Great Britain is

under investigation. As nearly 47 per cent. of Australian meat exports comes from Queensland pastures, efficiency in animal husbandry and in the processing and transport of the commercial products of the industry is obviously of great importance to the State. These points continue to receive due consideration in the development of departmental policy.

Brands registrations and transfers were greater in number than during the previous term. A new edition of the Brands Directory was published in the course of the year.

Sheep and Wool.

Conditions for the pastoral industry were generally fair until mid-summer, when a heat wave that lasted as long as two months over a large proportion of the Western grazing country was experienced. Following a prolonged period of scanty rainfall in the Central West, the heat wave left pastures parched, if not entirely bare, and increased the evaporation of surface water to a very serious extent. Losses among old and breeding ewes were heavy, and re-stocking was seriously delayed. As a consequence, it is expected that the natural increase in Queensland flocks will be very much less this year. Fortunately, relief country was available in the South and in districts nearer the coast, otherwise the mortality figures would have been very much higher.

Providential rains, ranging from three to nine inches, fell during the autumn and changed the outlook entirely. Dams and waterholes were filled to overflowing, stock routes were opened and values advanced immediately.

The market for fat sheep remained firm throughout the year, notwithstanding a reduction in skin values through the low price of wool. There was little demand for old sheep, on account of the large number of young stock on offer in the dry areas before the coming of the autumn rains. At present, high prices are ruling for all classes of good-conditioned sheep.

The Fat Lamb Scheme inaugurated by the Department is developing along well-planned lines. Small flock owners have already realised its advantages. Although the number of cross-bred lambs increased substantially during the year, it is extremely small in the light of the possibilities of fat lamb production in this State.

At the present time the tone of the wool market is firm with a prospect of greater price improvement. During the year 564,352 bales were catalogued (including 104,000 bales carried over from the previous season), and of that number 552,461 were sold. The average price for the season was 10.38d.

The stomach worm is still the most important internal parasite in the higher rainfall sheep country, and other parasites are becoming more prevalent. Sheep lice are causing concern in the clean western country, where there is a risk of infestation when stock that have been on agistment in infested areas are returned to their home paddocks. The wet spring favoured the blowfly pest, but the drier conditions later on reduced fly attack considerably.

The Farmers' Wool Scheme continued to operate to the advantage of the small flock owner. The average obtained for greasy wool was 9.91d., which is satisfactory, considering the class of wool handled by the Department.

Animal Health Station.

It was a year of steady progress at the Animal Health Station at Yeerongpilly.

Further research is necessary to ascertain the probable cause of mastitis. Mammitis vaccine distributed by the Station continues to give satisfactory results to dairy farmers in all parts of the State who require its use. In the course of the year, 27,154 doses were issued.

For inoculation against tick fever 6,253 doses were distributed. It is now possible to inoculate aged bulls and cows in milk and calf with comparatively little risk if attenuated blood is used, particularly if the animals are kept for the necessary period under stall conditions.

Pleuro virus doses issued numbered 65,779, and similar services in respect of the control of other animal diseases were continued through out the year.

Very important work was done at the Station in animal parasitology and entomology, and which is described fully in the Director's account of staff activities during the year.

Included in a wide scope of experimental work were important tests relating to pig and poultry keeping, all of which are described at length in incorporated reports. Generally, highly satisfactory results were obtained from these experiments.

Particular attention was given during the year to the more important diseases of dairy stock—including contagious abortion—and energetic measures were applied to prevent, as far as possible, their further spread. Field investigations of these and other pathological problems were continued throughout the period under review. Special investigations were made into the occurrence of spirochaetosis in pigs, sickness and mortality among horses in the Roma district, contagious pneumonia of sheep, and infectious catarrh of poultry. An extended account of this work is given in sectional summaries further on in this review.

Co-operative Associations.

Sixteen additional associations were registered in the course of the year, making a total of 199 associations and 1 federation registered under "*The Primary Producers' Co-operative Associations Acts,* 1923 *to* 1926," since the legislation came into force. As a result of amalgamations, cancellations, and voluntary discontinuance, the actual number in operation is 192. Some exemptions from the provisions of the Acts have been granted, and 173 auditors have been licensed thereunder.

Organised Marketing.

The year's operations of the several pools and commodity boards are described in detail in my report as Director of Marketing, which is part of this general review.

Publicity Branch.

Through official publications, the metropolitan and country Press, radio broadcasts, and the dissemination of useful information by other means, primary producers have been kept in touch with technical progress throughout the year. Disease and pest control, vegetable and

veterinary science, and agricultural and domestic economics were all covered by the extensive activities of the Department.

The Queensland Agricultural Journal has now completed its 38th year. During the year it was improved considerably and enlarged, and its steadily advancing circulation, which compares favourably with similar journals published elsewhere, is evidence of farmers' appreciation of the service it gives. The *Journal* has proved of definite value to the primary industries as a record of research and rural development, as well as a vehicle of topical information. Its usefulness is assured by regular contributions, many containing the results of original research, from officers of the scientific and technical staffs.

Numerous bulletins and advisory leaflets were issued in the course of the year. The radio lecture service, which provides for talks on seasonal subjects on Tuesday and Thursday of each week, and which are broadcast from Stations 4QG and 4RK, was continued in co-operation with the Australian Broadcasting Commission. This service, which covered nearly one hundred lecturettes during the year, is popular with a large farmer audience, judging by the numerous expressions of appreciation received.

Seasonal articles and regulatory announcements were supplied regularly to the Press.

The photographic services of the Department included the distribution of suitable prints and half-tone plates of rural subjects to various Australian and overseas publications. In this work the Department collaborated frequently with the Queensland Government Tourist Bureau.

Motion pictures of various aspects of country life in Queensland have also been made available, from time to time, for public screening.

The Department, in co-operation with the Department of Public Instruction, helped materially in the advancement of farm project work in the primary schools. In addition, numerous addresses on departmental activities and rural economy were delivered to various public and educational bodies.

Library.

Plans for reorganising the library are in hand with the object of increasing its general usefulness and extending library facilities to country and field staffs. Its usefulness as a clearing house for information, and its value as a central reference library, especially to research workers, was further demonstrated during the year. Monthly accession lists keep those concerned in contact with current thought, recent research, and technical progress in matters appertaining to the land and its industries.

A valuable exchange service, through which publications on agricultural and kindred subjects are received regularly from many countries, was also well maintained throughout the year.

General.

Research for the purpose of increasing efficiency, quality, and stability of crop production—securing a balanced abundance, in other words—has proceeded along the same broad lines as in previous years.

The several Branches of the Department have continued to make notable contributions to a more efficient rural industry. Considerable advances have been made in increasing yield and quality in every branch of agriculture and animal husbandry.

It is necessary to call attention to the serious problem of soil erosion through the action of wind and water. The remarkable effectiveness of vegetation in various forms in retaining soil and preventing a destructive run-off of rain water has been observed, and it would seem that a combination of the vegetation factor with mechanical control—terracing, contour cultivation, and sod banks where gully erosion is threatened—are among the more practicable means of preventing loss of surface soil from farm lands.

Stabilisation of production and more definite planning on both production and marketing sides of rural industry are present-day essentials if a prosperous agriculture is to be maintained. The interdependence of rural and urban communities is becoming recognised more widely. Among farmers, there is a growing appreciation of the fact that agriculture relies for sustained progress on the purchasing power of the consumer. On an increasing consumer demand the progressive prosperity of primary industry obviously depends. On the other hand it must be remembered that, while it is a natural desire to buy a commodity at the cheapest possible price, the permanent public welfare is involved —and that, of course, includes the welfare of the consumers themselves—if prices of primary products are forced below a level inconsistent with efficiency in production.

If agriculture is in a healthy economic condition and farmers are getting fair prices the consumers share that benefit, for, obviously, the rural market for secondary industries is then so much stronger. Reasonable returns in rural enterprise may be regarded as a guarantee of efficient production at fair cost, from which every section of the community benefits directly.

I have much pleasure in reporting that the administrative and directive services, and other work of the Department, was discharged by every Branch during the year with credit to the Service and with benefit to agriculture and related industries in this State.

The Registrar-General's annual compilation of statistics of agricultural production and livestock in Queensland, and which contains much valuable and interesting information in detail on our rural economy, is appended.

An account of the general activities of the Department is contained in the reports of the Director of Agriculture, the Chief Inspector of Stock, the Director of the Animal Health Station, the Supervisor of Dairying, the Director of Cotton Culture, the Director of Fruit Culture, the Chief Entomologist, the Government Botanist, the Agricultural Chemist, the Officer in Charge of Seeds, Fertilizers, Stock Foods, Pest Destroyers, and Veterinary Medicines Investigation Branch, and the Director of Marketing, all of which are incorporated herein.

E. Graham

Under Secretary and Director of Marketing.

REPORT OF THE DIRECTOR OF AGRICULTURE.

Conditions throughout the wheatgrowing areas before July may generally be described as distinctly unfavourable, and only as the result of isolated showers was any sowing of wheat done. These crops were to benefit later on by good rainfall in July, when the sowing of winter cereals became general.

Southern Districts.

Precipitations experienced during July throughout the south-eastern agricultural areas were in excess of the averages for that month, but unfortunately these conditions did not extend to August and September, and in some districts, particularly the Maranoa, fell very considerably below the average for these months.

As the result of lack of soil moisture and the incidence of an infestation of grasshoppers, no grain of any note was harvested throughout the Maranoa, whilst many late-sown crops throughout the Pittsworth, Warwick, and Allora districts which showed the effects of dry conditions were fed off to dairy stock. Those, however, that survived this dry period benefited by the copious rainfall that fell throughout the Darling Downs during the second week in October, and many heavy-yielding crops of prime grain were harvested.

Rain that fell during the month of November delayed harvesting operations and depreciated the quality of the grain. Barley crops, however, had in many instances been garnered prior to these precipitations, and consequently did not suffer to the same extent, whilst summer crops generally benefited.

December ushered in a period of heavy rains fairly evenly distributed in the southern portion of the State and of considerable value from a pastoralist standpoint, recordings being greatly in excess of the monthly averages. January and February rainfall showed a considerable diminution over the greater portion of the agricultural areas, and were below the monthly averages, since when these conditions have been maintained but the ratio of decreasing rainfall has been greater.

Obviously such conditions as set out above have been reflected in the results obtained from the maize crops, and whilst the yields from the early-sown crops proved satisfactory those from the later-sown areas proved to be the lowest recorded for many seasons.

Central and Northern Districts.

Although the meteorological conditions which obtained in the southern agricultural areas were generally unfavourable, those existing in the Northern and Central districts were considerably worse, and it was not until November that any general relief was experienced. This was particularly noticeable in the tobacco areas, although Bundaberg, Miriam Vale, and Mackay areas were fortunate in experiencing nice falls during October, from which, later on, they were to benefit.

Unfortunately, December proved in most instances hot and dry, and was responsible for considerable loss in the newly planted-out tobacco areas. January rainfalls, whilst much below the general monthly averages, afforded some slight relief. February also showed light recordings, but the Mackay district was fortunate in this respect, and recorded good, useful falls which exceeded the monthly average by over 5 inches.

April proved generally even drier than February, but the precipitations recorded during May were relatively heavy for that month, and exceeded in many instances the average monthly rainfall. Unfortunately, it proved too late to be of much benefit except to the late-planted crops that had survived the unfavourable seasonal conditions.

The following table shows the monthly rainfall recorded during the 1934-35 season over the principal tobacco-growing districts, and it will be noted therefrom that only in the case of Texas and Bundaberg was the annual recordings exceeded; but in the former district the benefits derived therefrom were offset by the attacks of blue mould which resulted from the conditions that followed on the rains received

during October, November, and December, and as the result some areas were ploughed out. A hailstorm in early December was responsible for further damage, and a heavy frost in mid-April further depleted the original area planted out. Under these unfortunate conditions it is estimated that the total area under tobacco in the Texas area receded from 650 acres to 565, and from this area it is expected that the total crop will not exceed 250,000 lb.

RAINFALL TABLE OF PRINCIPAL TOBACCO AREAS.

1934-35.	Marceba.	Townsville.	Charters Towers.	Bowen.	Mackay.	Bundaberg.	Miriam Vale.	Texas.
July	38	76	69	32	59	145	95	263
Average	31	60	62	96	159	180	177	182
August	4	27	62	59	42	152	73	237
Average	16	45	54	66	103	126	123	137
September	22	15	2	49	98	74	88	110
Average	19	80	85	83	157	160	156	162
October	30	39	91	42	365	289	387	506
Average	58	139	72	105	167	211	243	215
November	239	299	108	213	338	1,385	763	259
Average	125	182	147	129	299	253	285	233
December	28	80	25	150	207	521	635	772
Average	439	565	338	448	729	506	586	310
January	398	246	302	237	434	259	847	467
Average	948	1,111	551	1,015	1,448	882	989	332
February	502	60	117	540	1,659	626	580	216
Average	737	1,111	445	872	1,139	665	883	258
March	856	225	133	248	520	105	202	..
Average	696	729	368	549	1,181	497	486	..
April	42	47	..	97	317	704	295	23
Average	272	347	153	275	1,239	329	334	155
May	227	212	106	98	1,080	223	204	67
Average	60	130	79	130	371	259	203	159
June	5	11	115	7	68	52	27	17
Average	50	134	125	161	265	288	285	192
Total for 12 months	2,391	1,560	1,130	3,775	5,187	4,555	4,196	2,937
Total average, 12 months ..	3,451	4,633	2,479	3,929	7,255	4,356	4,679	2,561

In the Central district tobacco areas conditions were somewhat different, whilst Mackay registered what might be described as a generous rainfall. Sarina, situated less than 25 miles distant, registered 16·30 less, and this was responsible for some decline in the area under tobacco due to the fact that some growers made insufficient provision for seedlings over an extended planting season. Dry conditions prevailed, unfortunately, at Sarina for a longer period than obtained elsewhere in the Mackay district, but with the advent of good rains the opportunity was taken to plant up the areas prepared, and with the subsequent mild and showery conditions heavy yields of good-quality leaf were obtained.

Cultural operations in Miriam Vale, by reason of more favourable conditions, were some six weeks ahead of the Sarina and Koumala areas, but, unfortunately, blue mould put in an appearance in the field, and was responsible for considerable damage. Hail was also responsible for further loss in one particular locality, but in spite of these drawbacks the crop in the Central district may be described as fairly satisfactory. Leaf from this district has already realised prices ranging from 40d. to 45d. per lb., and is generally of good quality.

Reports received from Bowen areas show that the season generally was a failure, and only those who had facilities for irrigating reaped any satisfactory returns for the capital and labour expended. At the beginning of the season prospects were bright, freedom from blue mould being most remarkable—later on growers who transferred their plants to the field under somewhat dry conditions sustained losses through the plants perishing from lack of moisture, and although replantings were continued over a considerable period, it was not until February, when moisture conditions were more favourable, that any progress was made. The incidence of insect pests, however, played havoc with the crop, due to the extended period over which the leaf had been produced, curing operations having been prolonged and the quality of leaf is not up to the usual standard of Bowen district leaf. From an area of 123 acres approximately 20 tons of leaf has been harvested.

Reports from the Townsville district area show that the tobacco crop suffered very considerably from adverse conditions, and only where irrigation was practised were any satisfactory returns obtained, e.g., Ravenswood and Charters Towers. The cured leaf was bright, but owing to the dryness of atmospheric conditions is somewhat deficient in body and texture. Approximately 18 tons, it is anticipated, will be harvested from an area of 142 acres.

Reports from Dimbulah show that no rains of a general character were experienced until late February and early March. The period before these rains proved extremely hot and dry, which called for constant cultivation to conserve what little moisture remained in the soil from isolated storms that occurred at infrequent intervals. Due to the increased attention growers have given to this phase of tobacco growing, it is interesting to note that during this most trying period very few crops failed, and many maintained a fair rate of growth. It would appear that the constant care and attention given to the crop during the past season has been responsible for the excellent results obtained throughout the present season. Mr. Hamilton, in his report on Dimbulah, stresses the following:—

> "A season such as the one under review, although proving a severe trial to the growers, makes future production under more favourable conditions doubly sure, as instinctively there exists in the growers' minds past experiences, and as knowledge gained in this manner is the most valuable of all, production of a better grown product must follow. This fact must have a far-reaching effect on any district, for as production increases and the quality of the product improves it naturally follows that the demand for locally-grown leaf must also strengthen.

Insect attacks in the Dimbulah area caused considerable trouble, whilst blue mould, by reason of the use of the colloidal copper spray, as recommended by the Department, did little damage in the seedbeds, but made its appearance later on in the field, particularly on those crops grown on the sandy loam country along the Walsh River. Approximately 1,000 acres were planted in the Dimbulah area, for an average of 7 acres per grower, and it was estimated that the total tonnage will exceed 200 tons. A large proportion will grade bright, showing excellent body and fine texture, of which bright mahogany will form a very high percentage. Mareeba during the past season recorded a total acreage under tobacco of approximately 1,500 acres, and the estimated quantity of cured saleable leaf harvested therefrom is 150 tons. As in other tobacco districts, Mareeba suffered from the dry and hot periods between rains and patchy storms, and in many cases meant almost a total loss of the crop to growers. The quality of the leaf produced this season is, however, very good and exceptionally free from cercospora leaf spot.

At the first sales of leaf from the Mareeba district, held on 12th May, when approximately 30 tons of leaf were disposed of, general satisfaction was expressed as to the prices paid and the quality of the leaf purchased, it being considered that a greater quantity of low-grade leaf was purchased than during previous years. Average prices of 3s. 3d. were secured for some half-ton lots.

General instructional work on the cultivation, growing, curing, and grading of tobacco is still being carried out by agricultural instructors, who have been stationed in the principal districts. Two officers have been despatched overseas; one, an instructor, Mr. Tarrant, to study tobacco production and marketing in all its phases, whilst a pathologist, Mr. Mandleson, proceeded to America to study the extensive research work being conducted in America into disease control.

The extensive and comprehensive programme of experimental work commenced during the 1933-34 season was continued and enlarged upon during the present season. As to the general field conditions experienced throughout the tobacco-growing areas of this State, climatic conditions have been responsible for some failures, but generally very gratifying results have been obtained in many centres.

The programme mapped out for the 1934-35 season embraced the following, details of which will be found in the reports of the Senior Instructors in Agriculture and the Instructors in Agriculture.

Fertilizer Trials (Latin square).—Yelarbon (2), Miriam Vale (3), Koumala (1), Dunwold (1), Collinsville (1), Woodstock (1), Charters Towers (1), Hervey's Range (1), Dimbulah (5), Mareeba (6).

Seed Propagation Plots.—Bajool (1), Archer (1), Alpha (1), Pentland (2).

Seed Selection Trials (10 varieties).—Rockhampton (1), Townsville (1).

Randomised Varietal Trials.—Miriam Vale (1), Mackay (1), Sarina (1), Bowen (1), Collinsville (1), Woodstock (1).

Variety Observation Trial.—One established at Rockhampton—forty-six varieties.

Green Manuring Trials.—Miriam Vale (1), Koumala (1), Woodstock (1), Hervey's Range (1).

"*Tobacco Industry Protection Act of* 1933."—This Act came into force by Proclamation on the 12th July, 1934, and has as its objects the effective control of the pests and diseases which menace the industry. During the 1934-35 season 832 growers effected registration, whilst three merchants were granted permission to sell seed.

No growers applied for a license to grow seed for the purpose of selling same, but permission was granted to 35 growers to dispose of their seedlings, of which three were permitted to transfer seedlings from one district to another.

In the larger tobacco-growing areas little or no trouble is now being experienced with growers in the administration of the Act, and very appreciable co-operation is being experienced throughout those areas.

Wheat Season, 1934-35.

As previously stated, the early winter conditions that obtained prior to July were unfavourable for wheat sowing operations, and were responsible for the delay that occurred in this connection. Heavy rains experienced during July over a wide period brought a welcome relief, and considerably altered the outlook. Following on a somewhat dry period during the months of August and September, good rains fell during October, and the crop of grain ultimately harvested, although not equal in quantity to that of the previous season, was of a superior quality.

The Board took delivery of 3,670,000 bushels, which, with the grain retained by the growers for feed and seed purposes, would, it is estimated, total an approximate yield of 4,000,000 bushels.

Present-day harvesting methods, whilst permitting considerable economies in labour costs, are contributing factors to the gradual infestation of our wheat areas by wild oats due, of course, to the fact that the oats reach maturity earlier than wheat, and are usually shed before harvesting operations commence. The sowing of clean and graded seed on areas already oat-infested is in a measure a wasted effort, and in order to overcome this problem, which entails considerable loss to the wheatgrower as the result of dockages, consideration of a policy of a greater utilisation of sheep in connection with wheat production is imperative.

It is reasonable to assume that mutton and wool prices will retain (and perhaps improve) their present values, whilst the ultimate saving effected in connection with cultivating operations to overcome volunteer growths are factors worthy of consideration.

Experimental plots in connection with wheat trials were established at six centres as follows:—

Comparison of yields and rust resistance observations of 134 varieties and selections at J. Flegler, Irongate; G. J. Wills, Kincora.

Comparison of yields only of 134 varieties and selections.—O. McDowell, Allora; J. Bligh, Brookstead.

Seed propagation areas of 3 acres each were also placed with G. J. Wills, Kincora—Pusa × Flora 3216; J. Speed, Oakey—Pusa × Three Seas 3216.

Barley—Malting and Feed.

The 1934-35 season for barley showed an increased yield over that of the 1933-34 season, the respective quantities delivered to the Board being—

1934-35	.. ..	113,803 bushels
1933-34	.. ..	93,617 bushels
Increase	.. ..	20,286 bushels

The quality of last season's crop also gave a higher percentage of malting barleys as against that of the previous season with a corresponding lessening of that classed as feed.

1934-35—92·451 per cent. malting; 7·549 per cent. feed.

1933-34—73·634 per cent. malting; 26·366 per cent. feed.

Caterpillars were responsible for a considerable amount of loss, particularly where Chevalier was grown, but it is particularly interesting to note that selected Winter Archer, a variety introduced from England during 1933 by this Department, was not seriously affected, although growing alongside other barleys which were badly infested.

Comparative trials of twelve barleys were made on the farms of Messrs. Franke (Nobby), Wills (Kincora), McDowall (Allora), and J. Flegler, junr. (Irongate), and comprised the following varieties:—Archer Plumage, Burton's Malting, Cape, Chevalier, Messenger, R.C.B., R.C.B. 2908, Sea of Azor, Sentinel, Spratt's Archer, Vaughan, Winter Archer.

Canary Seed.

Although canary seed as a crop is capable of standing up to dry periods, the 1934-35 season proved its qualifications in this respect, and it was not until the October rains were experienced that any substantial growth took place. Yields in many instances were light but deliveries eventually made to the Board totalled 1,281 tons of uncleaned seed. Southern-grown crops, although competitors with those produced in Queensland, do not appear to have had any controlling influence on the situation, whilst the consumption of canary seed within the Commonwealth appears to have an upward tendency.

Peanuts.

The area planted for the 1933-34 season was estimated at 10,000 acres from which 3,241 tons of nuts were finally delivered to the Board. The present (1934-35) season, however, eclipsed all previous efforts, and as the result of the Board's advice to growers throughout the peanut-growing areas to endeavour to reach a 4,000-tons yield, 12,500 acres were planted. Although the season proved unfavourable for most crops, the peanut grower was distinctly favoured and the crop of 1934-35 season was garnered generally under favourable conditions. At 30th June the Board had taken delivery of 3,313½ tons, and it was conservatively estimated that a further 900 tons was still in the field. Weather conditions having since been favourable, it is reasonable to assume that this estimate will ultimately be realised and will result not only in a record area but also a record yield for Queensland. The necessity for some attention being given to the improvement of peanuts for seed purposes has in the past been impressed on the Board, and during the past season, with the co-operation of Mr. L. Young, of Wooroolin (a Board member) this Department carried out seed selection work on his property. It is intended to gradually extend operations and eventually include adjoining farms in order to establish a selected seed area from which seed supplies can be drawn for general distribution.

Potatoes.

The 1934 summer crop suffered severely from an attack of Irish Blight (*Phytophera infestans*) and only those growers who took preventive measures against this fungus succeeded in harvesting satisfactory crops. The freedom from any serious outbreak of this disease over a series of seasons is apt to lull growers into a false sense of security until a period when seasonable conditions become favourable and a general outbreak of the disease recurs. The slogan "Prevention is better than cure" is one which all potato growers should adopt and coincidentally regard the operation of dusting or spraying with approved fungicides as an imperative feature in connection with potato production.

Trials (comparative) with potatoes were given effect to at Oxenford, Imbil, Glencoe, and Swanfels. Reports dealing with the two former trials are submitted by Mr. L. G. Miles, whilst Mr. N. A. R. Pollock's report gives particulars of the two latter tests.

Maize.

The crop sown prior to December, where careful attention was given to the cultivation, gave fairly satisfactory results. Those crops sown subsequently to the month of December, however, suffered from insufficient moisture during the period of inflorescence and were more or less failures.

Although prices advanced somewhat during the autumn months due to a demand for grain for feeding sheep in parts of the drought-stricken areas, supplies were maintained from the Burnett and other maize-growing districts where stocks of maize have been held in tanks and silos in anticipation of a rise in prices. It would appear, however, that no extensive stocks of maize are now held, and failing general rain an advance in the prices ruling at present seems inevitable. Maize selection work was somewhat restricted owing to seasonal conditions.

However, seed propagation areas were established with the following growers:—

J. Scheu, Mount Kilcoy—Star Leaming.
M. Reeves, Imbil—Improved Yellow Dent, Reid's Yellow Dent.
J. McAtee, Kilcoy—Funk's 90 Day.
J. Hartvigsen, Imbil—Improved Yellow Dent, Reid's Yellow Dent.
Duncan Bros., Allora—Funk's 90 Day.

In addition to the above, maize variety trials were arranged at Swanfels on the farms of R. Eastwell and H. Learmonth respectively. A maize fertilizer trial was also established on the farm of C. Anstey in the same district, particulars of which appear elsewhere in the report of Mr. N. A. R. Pollock.

Sorghums.

Sorghums introduced from U.S.A., Egypt, and South Africa during the 1933-34 season and tried out at St. Lucia, met with unfavourable conditions thereat. These were submitted to further trials at Swan Creek on the property of Mr. A. Tullock and at the Boys' Farm Home, Westbrook. Although the yields at Swan Creek where varieties of dwarf-growing habits were established proved very satisfactory, the influx of parrots caused damage to such an extent that a comparison of yields was rendered impossible.

At Westbrook, at which centre, tall medium and dwarf varieties were tried out, an infestation of the green bug disallowed comparisons, and the only seed saved was from those plants on which "hooding" was carried into effect, primarily for the purpose of preventing cross pollination.

Similarly a trial of the same character was made at Imbil, and here the sparrows were responsible for further damage. It would appear that only in large areas devoted entirely to the production of grain sorghums can any reasonable hope of saving the bulk of the crop be realised. Only where other types of grain sorghums such as Sudan Dhoura or Feterita have been tried out in fair-sized areas (40 acres and upwards) has any measure of success been attained. Details of the trials which appear in the reports of two other officers are given elsewhere. A saccharine variety of sorghum, the seed of which was received from Italy during the latter portion of last year, has been tried out in the Northern, Central, and Southern areas with considerable success, and a fair quantity of seed has been obtained from comparatively small areas.

Pasture Plots.

The policy of gradually extending the pasture plots from the Southern to the Northern areas has been continued primarily for the purpose of having supplies of various grasses at centres which will permit of their rapid transport (so necessary where roots or cuttings are concerned) to primary producers who desire to give certain varieties a trial under the varying conditions which obtain in this State.

Until recently no supplies of exotic grasses were available for distribution from pastures further north than Townsville with the exception of a few varieties on the Atherton Tableland, but during the past season extensions have been made as far north as the Daintree with generally satisfactory results, and at the lastmentioned centre at least two grasses, tried out, are likely to prove of value to that district.

Efforts are being concentrated in the direction of an extension of these propagation areas and at the same time adding by introduction from the older established plots those varieties which are lacking in the newer established areas in order that each plot as far as is possible will be representative of those established in other districts.

Their subsequent introduction to the hinterland will thus be rendered more easy of accomplishment. Obviously this can only be accomplished as supplies of seed, roots, and cuttings for such distribution become available.

Particulars of grasses under trial and the particular localities in which they have been established are supplied in the various reports of the Instructors appearing elsewhere.

Destruction of Green Timber.

Since October, 1934, a series of experiments upon the poisoning of undergrowth with arsenic pentoxide has been in progress and will be completed in September of this year.

Four plots, each of approximately half an acre in area, are poisoned each month, a different strength being used on each plot. The object of the experiment is to find an efficient and economical method of eradicating undergrowth, saplings, and suckers from land of low value, but suitable for grazing purposes.

The chief points aimed at in the experiments are:—

1. The determination of the most suitable months of the year to poison timber, and the seasonal conditions which influence the death of the tree.
2. The most efficient economical strength of poison to use.
3. The determination of the most effective way of cutting the saplings.
4. Whether the method of applying the poison to the stump through a fine spray is more efficient and more economical over a large area than the method of applying it with a swab.
5. The determination of the best stage of growth at which to poison in order to obtain the best results.
6. The effect of arsenic pentoxide upon the different species of undergrowth.

Recent results have been rather encouraging, and on land of little value, it is the only method of clearing that could be considered. Results so far indicate that a strength of 2½ lb. per gallon is as effective as a strength of 3 lb. Experiments are being concentrated upon box which has proved to be very difficult to kill.

The closing down of Kairi and Roma State Farms was decided upon during the period under review and clearing sales were held at these institutions on the 28th and 29th June. It is the intention to reserve an area of approximately 20 acres on each of these properties for experimental work, and it is intended to lease them for a period of years.

I desire to place on record my appreciation of the work of the agricultural staff during the past twelve months, all of whom have given loyal and efficient service.

A. E. GIBSON, Director of Agriculture.

Staff Reports.

SOUTHERN DIVISION.

Mr. N. A. R. Pollock, Senior Instructor in Agriculture, reports:—

Seasonal Conditions.

On the Darling Downs and Maranoa the seasonal conditions were favourable from a pastoral standpoint, especially from July to January, inclusive, when the rainfall was up to, or a little over, the average for that period. In February and March the rainfall was much under the average, while that of the remaining months, except in some localities, was unsatisfactory. Good rains are now needed to supply bottom moisture to promote winter and early spring growth.

Agriculturally, the season on the whole was rather unfavourable, the rain in the early part of the year falling at the wrong time for many crops, while those sown late did not receive a sufficiency.

Supplies to butter and cheese factories were fairly well maintained, but showed a marked decrease in the later months, when pastures had depreciated in quality. Although growth of crops for feeding off, as well as for conservation, is not uncommon, there is much room for improvement, not only in the growth of fodders but in their feeding with pasturage to secure a desirable nutritive ratio. Considerable interest in this latter direction has been displayed in certain directions.

Experimental Work.

Crop experiments were confined to fodder trials at Tara, Tullagrie, and The Gums, on soils representative of three main types. These were, respectively, a heavy clay loam at Tara, where the original growth was a brigalow scrub with some belah; a sandy to gravelly clay loam at Tullagrie, in open forest country; and a light clay loam at The Gums, where the original growth was belah, gum-topped box, brigalow, wilga, &c. The results were as follows, per acre:—

Crop.	Tara.	Tullagrie.	The Gums.
	T. C. Q. L.	T. C. Q. L.	T. C. Q. L.
Skinless Barley and Peas	12 10 2 24	2 19 1 24	18 19 1 4
Skinless Barley and Vetches	13 3 2 8	3 1 0 8	19 2 2 0
Cleveland Wheat and Peas	9 19 1 4	2 1 3 4	not established
Cleveland Wheat and Vetches	10 12 0 15	2 17 3 12	not established
Sunrise Oats and Peas	12 4 1 4	4 6 3 4	10 15 1 12
Sunrise Oats and Vetches	not established	2 17 3 12	11 5 0 0
Algerian Oats and Peas	10 15 1 12	3 17 0 16	13 13 0 24
Algerian Oats and Vetches	11 14 2 16	6 8 2 8	13 0 1 12
Florence Wheat and Peas	8 13 2 8	3 13 3 20	11 11 1 20
Florence Wheat and Vetches	8 3 3 20	4 16 1 20	11 5 0 0

The rainfall recorded at The Gums was as follows:—Crops sown 4th May.

	Points.
4th May	0·55
8th May	0·25
9th May	2·07
Total	2·90

	Points.
16th June	0·20
25th June	0·54
26th June	0·20
30th June	0·63
Total	1·57

	Points.
1st July	0·05
3rd July	0·05
4th July	0·28
5th July	0·77
28th July	0·30
29th July	0·80
Total	2·25

	Points.
11th August	0·10
25th August	0·56
26th August	0·67
27th August	0·19
Total	1·52

	Points.
2nd September	0·48
22nd September	0·28
Total	0·76

On the trial field at The Gums the growth was partly grazed, and partly cut and fed to dairy cows. The increase in yield over that from pasture when feeding was commenced averaged 2·75 lb. cream of 40 per cent. test per cow, until the whole was consumed.

The growth of a legume with the cereal does not appear to influence as high a yield as when each is grown separately. While the mixture would suggest a narrower and more acceptable nutritive ratio when cut for hay, the inclusion of the legume when the crop is grazed is unnecessary in view of the much higher protein content of the cereal in early and mid growth. In this connection, it was noted that oats growth at 8 inches high has a nutritive ratio of 1:1·5, wheat at 5 inches high a ratio of 1:2·2, while the average ratios of older growth are each 1:5·9. The last mentioned ratio is the most acceptable. It has been noted that many dairy farmers graze their cows wholly on young wheat and oats for

lengthy periods. This practice suggests a waste of protein; a more economic return would be secured if dry roughage and a carbohydrate concentrate were fed in conjunction. By so doing, the necessary quantities of dry matter could be adjusted and the most desirable nutritive ratio arrived at.

Maize.

Crops sown prior to December gave generally satisfactory yields, where careful cultural attention had been bestowed. Crops sown in December and January, however, did not receive sufficient rain in February and March and were more or less complete failures. It has been noted that the method of planting, in most instances, on the Darling Downs as well as the general insufficiency of cultural attention is not conducive to good yields. The largest collective acreage appears in the returns from the Warwick district. Statistics show the average yield for ten years from 1924 to 1933 inclusive as 19·91 bushels, the highest being 38·87 in 1924 and the lowest 1·63 in 1926. It is considered probable that a thinner seeding in wider spaced rows and the planting in open furrows (listing) with more frequent cultivations would tend to improvement. The average quality of seed used is also capable of much improvement.

Variety Trials.—Two experiments as variety trials were arranged at Swanfels during the past year, and one with fertilizers.

The varieties sown were Star Leaming, Golden Beauty, Funk's 90 Day, Reid's Yellow Dent, and Improved Yellow Dent. Depredations by cut worms resulted in a poor stand on both farms, while the further ravage of a pig at one farm rendered a comparison of yields impracticable. All varieties, however, could be expected to yield well, Star Leaming especially.

Fertilizer Trials.—Results were very satisfactory. The soil—heavy black—had been prepared thoroughly. Fertilizer was applied and seed sown on 23rd October. The crop commenced to tassell on 25th December. Rainfall:—

	pts.		pts.
October ..	235	January ..	317
November ..	273	February ..	409
December ..	490	March ..	Nil

Results at acre rate:—

Plot.	Fertilizer Applied.	Yield.	Increase over Control.
		Bus. Lb.	Bus. Lb.
1	Control	33 52	..
2	1 cwt. super., ½ cwt. sulphate of ammonia	52 26	18 30
3	Control	37 44	..
4	1½ cwt. super., ¾ cwt. sulphate of ammonia	55 11	17 23
5	Control	51 39	..
6	2 cwt. super., 1 cwt sulphate of ammonia	69 0	17 17

The field was on a slope on which slight erosion had occurred during the several years of cropping, the plots being drilled across. The increased yield of the controls of 3 over 1 and 5 over 3 would suggest a greater fertility due to such erosion. Allowing the soil in each pair of plots to be more nearly similar, the increase due to the lighter application would suggest no advantage from a higher quantity.

Finality in fertilizer trials cannot be assumed from one trial, so it appears advisable for this experiment to be repeated over two or more seasons. In addition to further fertilizer trials it is suggested that spacing of seed in rows and spacing between rows be tested and in "listing" against level sowing.

Potatoes.

The yields of potato crops from early plantings were in general very satisfactory, but of those planted late few gave a worth-while return. These latter experienced little or no rain from planting in February, until the third week in April. Top growth was then made, but in most instances heavy frosts occurred before maturity was possible.

Variety Trials.—A comparative trial of ten varieties was carried out. Particulars:—Soil—dark heavy loam—hillside (scrub). Planted 18th August. Harvested 3rd January. Seed treated with hot formalin.

The crop was free from disease, and damage from insect pests negligible. Sets were planted 18 inches apart in rows 3 feet apart. Results at per acre:—

Variety.	Saleable.	Smalls.	Total
	T. C. Q. L.	T. C. Q. L.	T. C. Q. L.
Jones' Success	7 18 1 22	1 12 3 19	9 11 1 14
Mount Gambier	5 7 1 22	1 4 2 3	6 11 3 25
Factor	5 6 3 20	0 16 0 12	6 3 0 4
Coronation	5 5 2 15	1 1 3 22	6 7 2 9
Satisfaction	4 71 2 14	2 0 0 1	6 17 2 26
Langworthy	4 5 1 1	0 11 0 10	4 16 1 11
Up to Date	4 1 1 3	0 19 2 5	5 0 3 9
Brownell	4 0 2 7	0 14 2 16	4 15 0 24
Dakota Red	3 10 1 11	0 10 0 5	4 0 1 16
Scottish Triumph	2 17 0 11	1 4 2 21	4 1 3 4

The rainfall during the growth of these varieties was—

	Points.
18th to 31st August	200
21st September	25
11th October	150
15th October	25
23rd October	150
5th December	30
29th December	65
	645

Another variety trial in randomised plots was arranged at Glencoe. Seed was planted on 22nd February, but owing to lack of rain growth above ground did not show until May, following rain in late April. No result of value can be expected from this trial, because of frosts during the trial period.

Grain Sorghums.

Very few farmers realise the value of the grain group of the sorghum family, the seed of which in palatability and nutritive value

approximates that of maize. Although the total digestible nutrients per 100 lb. are on the average 85 lb. for maize and 81 lb. for sorghum, the digestible crude protein content of 9 lb. for sorghum against 7·5 lb. for maize suggests a superiority of the former, since the supply of protein demands most attention in balancing a feeding ration. The capacity to yield heavier crops, under unfavourable conditions, than maize emphasises the superiority of the grain sorghums, over almost the whole of the Darling Downs and Maranoa. The main deterrent to popularity lies in the liability to ravage by birds, chiefly parrots. Where small crops are grown in isolated places, these congregate from miles around and inflict serious damage. If they were distributed over a much larger acreage the damage would be negligible. Parrots multiply very slowly, a fact which suggests easy control by concerted action.

A serious pest, the green bug, was much in evidence this year, especially in districts of higher average rainfall. It is not regarded, however, as likely to be detrimental in seasons of, or in districts subject to, a rainfall insufficient for maize.

The extra labour of harvesting tall-growing varieties has directed attention to trials of dwarf kinds which could be dealt with by wheat-harvesting machinery such as the reaper-thresher.

Variety Trials.—A trial of six varieties of low habit of growth was arranged at Swan Creek, in the Warwick district. Those grown were Brown Yolo, Kalo, Club Kafir, Dwarf Pink, Giza 44, and Standard Milo. The yields in each case were very promising, but the influx of parrots caused so much damage that comparisons of yields could not be made. A number of heads of each variety were hooded and quantities of pure seed secured. As instancing the superiority in yield of grain sorghums, a crop of maize nearby sown at the same time did not produce any grain. The varieties Brown Yolo and Kalo, in which the seed heads project well above the flag, suggest ease of harvest by machinery. Wheatland Milo and Day Milo are faulty in this respect, as much of the flag would be cut with their heads and be less easy to thresh and clean.

A trial of tall, medium, and dwarf varieties was arranged at Westbrook, the following being sown:—Atlas, American Early Red, Dwarf Pink, Bergville, American Red, Bergville Selection, Birdproof, Black Hull C.I. 71, Brown Yolo, Club Kafir (original), Day Milo (original), Dawn C.I. 340, Giza 44, Giza 16, Haye's Dawn, Hegari (original), Kalo, Klerksdorp, Natal, Old White, Pietersburg White, Redfort Hayes, Reed C.I. 628, Sharon, Western Black Hull Kafir, Wheatland Milo, Potchefstroom, and Dawn.

The soil was well prepared, cultural attention good, and growth excellent under a satisfactory rainfall. Unfortunately, an infestation of the green bug, which destroyed the seed in the milky stage, disallowed comparison, seed only being secured where the heads were hooded.

It is considered advisable for trials to be instituted in further directions and in localities further west.

Pasture Grasses.

Improvement of pasturage by the introduction of proved exotic grasses and by the dissemination of the most nutritive of those endemic is regarded as worthy of much attention. The lowering of the carrying capacity, despite the season, on many holdings, is regarded as due to the disappearance therefrom of many of the most palatable and nutritious growths, and the consequent spread of those less sought, which are generally of lower food value. With the object of trial, as well as a source of supply for tests in other directions, pasturage plots were established during the year at Toowoomba. This was facilitated by the interest of the City Council, which not only made the area available, but had it fenced securely and provided relief labour for its preparation. The establishment of the plots was not effected until towards the close of this year; consequently no report on behaviour is yet possible. The following kinds were established in April and May from roots secured from the Roma State Farm, St. Lucia plots, and from the Queensland Agricultural College at Gatton:—

Amphilophis glabra	*Eragrostis superba*
Amphilophis pertusa	*Eragrostis tenuifolia*
Brachiaria brizantha	*Hyparrhenia rufa*
Brachiaria decumbens	*Ischæmum sulcatum*
Brachiaria dictyoneura	*Iseilema laxum*
Chloris pycnothrix	*Ixophorus unisetus*
Cynodon plectostachyum	*Panicum antidotale*
Digitaria eriantha	*Panicum isachne*
Digitaria Milangiana	*Panicum maximum*
Digitaria Pentzii	*Pennisetum ciliare*
Digitaria Polevansii	*Pennisetum clandestinum*
Digitaria valida	*Pennisetum massaicum*
Eragrostis curvula	*Polytrias diversifolia*

Seed of the following was sown:—

Bromus marginatus	Couch, local strain
Bromus unioloides	*Ehrharta calycina*
Cocksfoot	*Festuca elatior*
Couch, Tanganyika Strain	Lucerne
Clover, Red	*Phalaris tuberosa*
Clover, Ball or Cluster	Rye, Italian
Clover, Alsike	Rye, Perennial
Clover, Crimson	Rye, Wimmera
Clover, White	Trefoil, English
Clover, Subterranean	Trefoil, Burr
Clover, Subterranean (early)	Sheep's Burnet
	Wallaby Grass

Many of the grasses propagated are indigenous to tropical and subtropical Africa, and some from Asia, where climatic conditions are comparable with different parts of this State. *Cynodon plectostachyum,* to which a local name of Budgee Grass has been given, appears likely to be a valuable introduction, as its fodder value by analysis is equal to that of Couch, a congener. At Roma on almost pure sand, and at Gatton College on a heavy black soil, its vigour of growth and rapid spread were most attractive. Several farmers to whom roots were supplied speak very highly of its growth and palatability to all kinds of stock. It can be propagated both by seed and cuttings. The Woolly Fingers, as certain species of *Digitaria* are known, are esteemed for their drought resistance and good food value, but the general infertility of their seed necessitates propagation by root divisions. At Roma *D. valida* appears to be the most promising, as when planted out in sandy soil at intervals its runners soon resulted in a compact sward.

While attention is being paid to growths introduced from other countries, it is desirable that indigenous kinds should not be neglected. The species of *Chloris, Paspalidium, Brachiaria,* &c., that prevail on the heavy clay loams of brigalow scrub areas, the species of *Eragrostis,* some barely known botanically, to be found on soils

from the desert sandstones and the many kinds to be found on the coastal areas of the Gulf, Peninsula, and elsewhere, are worthy of attention.

Tobacco.

In the No. 7 district a total of 160 persons were registered as tobacco-growers during the year under review. The number actually engaging in the industry was 141, located as follows:—Ballandean, 1; Inglewood, 12; Yelarbon, 60; Texas, 66; and Limevale, 2.

The aggregate area planted, according to growers' estimates, was 700 acres, of which 650 acres was designed for flue-curing and 50 acres for sun and air curing.

Following an attack of blue mould, the grower at Ballandean and five growers at Texas destroyed their crops and abandoned production. Two growers at Yelarbon sold their interests to other registered growers. There were thus 133 growers who produced leaf for sale.

Seasonal conditions were not propitious for satisfactory production. Although irrigation was practised, the rainfall favourable for planting out, and excellent strikes secured, the generally cool days and colder nights up to December, kept soil temperatures lower than desirable. As a consequence, growth of plant was markedly slow—a matter of comment by all growers. Falls of rain in October, November, and December respectively were followed by attacks of blue mould of varying severity on all farms, which damaged or destroyed much leaf and in several cases resulted in the ploughing out and abandonment of the crop. Approximately, 27 acres collectively were so destroyed. A hailstorm in early December practically destroyed the crop on a total of 58 acres. A heavy frost on 17th April did much damage to the unharvested leaf on some 148 acres. The extent of loss in this direction could hardly be estimated, as on some areas picking was nearly completed and on others just commenced. After this frost a considerable amount of lightly frosted leaf was cured.

Although with few exceptions there was excellent promise of satisfactory yields in the early stages of growth, the misfortunes reducing the acreage from a total of 650 to 565 were followed by others which seriously affected production. Blue mould, frost, and insect pests so injured leaf that a total of 250,000 lb. is hardly likely to be exceeded.

The average quality on every farm is held by growers to be much superior to that produced in years past. This is considered to be due to greater consideration being given to ripeness at harvest and also to improvement in the method of curing. The proportion of green leaf this year was much less than that of last year, which was also a reduction on the previous one.

On account of climatic conditions it is not expected that the best quality leaf from these districts will equal that from the north, where a more acceptable atmospheric humidity prevails during growth of crop. It is estimated that in the highest quality grades there will be a difference of at least 3d. per lb.

All lots submitted at auction met with a ready purchase, first grades realising 36d. to 40d. per lb. All growers expressed satisfaction with the prices received. A considerable quantity of leaf is sold on the farms to representatives of manufacturing interests; particulars of any such sales are not at present available.

Experimental.—One series of randomised plots with different fertilizer applications was arranged on the Glenarbon plantation, Yelarbon, but growth thereon was destroyed by a heavy hailstorm before any result was obtainable.

Fertilizers.—Although many growers expressed their intention of using fertilizer with the crop, only a few applied it. The noticably slow and unsatisfactory ripening of leaf where no applications were made, appears likely to influence its use in the coming season. Where fertilizer was applied, all leaf was harvested prior to the occurrence of frost. Such leaf was noted as superior in colour and texture to that unfertilized.

Instructional.—Considerable attention was given to tobacco leaf production in the Texas, Yelarbon, and Inglewood districts during the year under review, visits being paid to growers each month. As a result of instruction and advice given, much improvement has been effected. The better preparation of seed-beds and their enrichment with organic matter, with consistent spraying of approved fungicides, where practised, resulted in a plentiful supply of disease-free plants. A few growers who did not follow advice had extreme difficulty in raising plants to set out sufficiently early to escape frost.

Where instruction in irrigation and the setting out of plants in the field was followed, excellent strikes, in some cases 100 per cent., were obtained. Subsequent cultivation was not as satisfactory as desirable, growers appearing to adversely regard the use of the hoe. Practical demonstrations, however, in the improved growth of plants when the soil was kept loose between and at the base of each, are calculated to influence improvement in future. Advice on the application of water was largely followed; through this, root rots, so prevalent in the previous season, were reduced to a minimum with consequent betterment of leaf quality.

The areas on which tobacco is grown in these districts are, in view of the necessity for irrigation, confined to stream alluvials. They are thus scattered along a stretch of 137 miles—14 miles of Oakey Creek, Limevale to Texas—90 miles of the Dumaresq river, being 48 miles Riverton to Texas and 42 miles Texas to Yelarbon—and 33 miles on McIntyre Brook from Yelarbon to beyond Inglewood. Demonstrations were given to groups in the Inglewood and Texas districts, advice as to the indications of ripeness in leaf given to all farmers, and the regulation of ventilation during cure given to those whose cures could not be supervised. The superior colour and quality of leaf in the cures wholly supervised provoked much favourable comment, and evoked many applications for similar demonstrations next season. Those who followed advice regarding ventilation did better, but in many cases failure to rise temperatures at the right time affected clearness of colour. It is not to be expected that growers with some years of experience, though convinced that their methods can be bettered, will closely follow advice in every direction towards improvement. The majority, however, express appreciation of the value of the advice given, and promise more particular attention thereto next season.

There are indications that the number of growers and consequently the collective acreage will be increased this coming season, since many land owners speak of further applications for blocks of land to be worked on shares.

Insect Pests.—The grasshopper plague in the south-west, which received much attention from officers of the Entomological Branch, did comparatively little damage to growing crops. In the Inglewood and Yelarbon districts some small crops of wheat, oats, and potatoes were damaged, but the pest paid no attention to tobacco. In this direction, parasites appeared to gain control before the appearance of a second generation.

Portion of each of three tobacco crops in the Texas district was damaged by another species of grasshopper, which appeared to be wingless. Contiguity to pasturage drying off for lack of rain appeared to be responsible for transfer of attention therefrom, as when rain fell to revive the pasturage attack on tobacco ceased.

The depredation of the brown vegetable weevil on tobacco, complained of in previous years, was, in this, regarded as negligible. The pest, however, was present in many vegetable gardens.

The ravage of the green bug was this year much more pronounced than in any one previous. In addition to garden and truck crops, particularly tomatoes, field crops of sorghum and cowpeas were in several directions seriously infested; in these latter yield of seed was greatly depleted, and, in cases, prevented.

Leaf-eating larvæ on tobacco plants were plentiful in January, but when dry baiting with a pollard or bran lead-arsenate mixture was practised, control was more or less easily established.

Leaf miner and stem grubs in tobacco were less in evidence than in the previous year.

The enforcement of the regulations of the Tobacco Industry Protection Act as regards destruction of plants within four weeks of completion of harvest therefrom, is regarded as at least contributory to a lessening of these pests. Early ploughing after harvest of leaf is also regarded as a desirable procedure in control.

Plant Diseases.—Except in the case of tobacco, plant diseases did not appear destructive. Blue mould, as previously mentioned, was largely controlled in the seed-beds and its damage confined in the field. The early destruction of plants after harvest and the prevention of any volunteer growth thereafter certainly assist towards control.

An instance of disease affecting the saffron thistle was brought under the notice of the Vegetable Pathologist, the example being obtained at Guluguba.

CENTRAL DIVISION.

Mr. G. B. Brooks, Senior Instructor in Agriculture, reports:—

Seasonal Conditions.

The absence of the usual wet season over a large portion of the Central Division of the State has had an adverse effect on the various phases of agriculture carried out, more particularly in the areas north of St. Lawrence.

The sugar-cane crop in the Plane Creek and Mackay districts has suffered acutely from lack of moisture and, had it not been for the fact that there are large quantities of standover, the tonnage for the coming crushing would be considerably under that of recent years.

The seven butter factories operating in the Central district had difficulty in handling the heavy supplies of cream during the early summer months, but from December to March, a period of high temperatures combined with absence of rain was experienced which brought about a serious decline in production.

Scattered showers falling at wide intervals along the coast have been the means of keeping the pastures from drying out, so that stock generally are in fair condition.

Cotton during the early part of the season gave promise of a record yield, but the prolonged heat wave proved disastrous to the setting of the top crop.

The following table shows the rainfall and number of wet days recorded for the twelve months in four widely apart districts:—

—	Mackay.		Rockhampton.		Miriam Vale.		Callide.	
	Points.	Wet Days.	Points.	Wet Days.	Points.	Wet Days.	Points.	Wet Days.
July	59	9	42	5	95	2	87	3
August	42	5	46	5	73	4	90	2
September	98	8	30	4	88	4	62	2
October	365	14	321	9	387	8	253	5
November	338	21	702	12	763	9	821	8
December	207	11	355	10	635	6	409	8
January	434	11	411	5	847	6	646	6
February	1,659	8	379	15	580	7	364	7
March	520	15	149	10	202	10	132	4
April	317	16	75	7	295	7	75	1
May	1,080	20	109	1	204	5	155	2
June	68	11	40	5	27	3	75	3
Totals ..	5,187	149	2,659	89	4,196	71	3,169	51

As showing the erratic nature of the rainfall, while Mackay enjoyed an annual fall of 52·92 inches with 149 wet days, Sarina, 23 miles distant, recorded only 36·62 inches with 94 wet days.

Wheat.

There was a slight decrease in the area under crop. The rainfall during the growing period was of an erratic nature. While there was sufficient at planting time to ensure a good

germination, no further useful falls were experienced until after the crops were well in ear. This lack of moisture was responsible for the production of a somewhat pinched grain. Late frosts did some damage in low-lying situations.

From the varietal trials carried out at Theodore, Nipan, and Biloela, much useful data were secured regarding the suitability of various new cross-breds for the districts in which they were grown. Particulars relative to yields secured, quality of grain, &c., have already been supplied.

Barleys.

A number of malting barleys were tried out at Theodore, but the dry conditions and extreme temperatures brought about premature ripening.

Details regarding yields, &c., have already been furnished.

Oats.

The growing of some payable crop in rotation with cotton is a problem requiring investigation in the Theodore irrigation area. Oats has been tried out with only a fair amount of success, one of its drawbacks being a tendency to coarseness. Arrangements have been made with the local producers' association to determine the suitability of certain fine-stemmed varieties, including belah, quondong, and sunrise, with Algerian for comparison.

Tobacco.

Although tobacco is grown in quite a number of localities throughout the Central district, extending from Bundaberg to Mackay, the main centres of production are Miriam Vale and Sarina.

The total absence of the wet season in the Northern portion of the district was responsible for a slight decline in the area under crop, as a result of growers not making provision for a supply of seedlings for an extended planting period. The dry conditions, unfortunately, prevailed until the latter end of March, when a welcome break occurred, advantage of which was taken to plant the areas prepared. Subsequent conditions have been showery and mild, in consequence of which heavy yields of good quality leaf are being harvested. Some of the early cured leaf offered at the Brisbane June sales brought top market rates.

Cultural operations were in progress in the Miriam Vale district some six weeks ahead of Sarina and Koumala. This district enjoyed favourable rainfall throughout the whole of the growing season. Unfortunately, blue mould made its appearance, doing a good deal of damage, more particularly in the field. A hail storm was also responsible for a heavy loss of leaf in one particular locality. Speaking generally, the crop in this district may be considered a fairly satisfactory one. A good deal of the leaf being marketed sold at prices ranging from 40d. to 45d. per lb.

There are only a few growers in the Bundaberg district, the total area under crop not exceeding 20 acres.

A considerable amount of investigation work, embracing seed selection and propagation, varietal, fertilizer, rotational, and green manuring trials, has been carried out in the following tobacco-growing districts:—

Mackay Area—

Varietal Trials—Laws and Baker, Sarina.

Fertilizer Trials—R. J. and C. Atherton, Koumala; C. A. Preston, Dunwold.

Rotational—Laws and Baker, Sarina.

Green Manuring—R. J. and C. Atherton, Koumala.

Miriam Vale Area—

Varietal Trial—Mahoney and Larsen, Miriam Vale.

Fertilizer Trial—Mahoney and Larsen, Miriam Vale; T. Craig, Miriam Vale; B. Anderson, Miriam Vale.

Rotational—E. Dahl, Miriam Vale.

Green Manuring—Petersen and Sons, Miriam Vale.

Rockhampton Area—

Seed Selection, 10 varieties—C. Bruigom, Glenmore.

Variety Observation, 40 varieties—M. Duke, Parkhurst.

Crossbred Trial, 130 varieties—M. Duke, Parkhurst.

Seed Propagation, Jamaica—Brown Bros., Archer; Bonanza, R. W. Conaghan, Bajool; Conqueror, C. Robins, Alpha.

Variety Trials.—The testing out of varieties suitable for the widely varying conditions of soil and climate to be found in the tobacco-growing districts throughout the State is a matter of very great importance. Owing to the erratic nature of the seasons, these tests will naturally have to be extended over a number of years before definite results can be secured. It would appear, however, from trials already carried out, that some of the more recent introductions will give better results under adverse circumstances than those at present in cultivation. Those showing particular promise are Jamaica, gold dollar, and bonanza.

Attention is also being given to the securing of a suitable variety for a more fertile soil than that in which the bulk of the crop is at present grown.

Forty varieties were under observation in the plot at Parkhurst. These were, with the exception of Baker's Sumatra, Turkish, and Dungowan, propagated from seed imported from America. In view of the danger of introducing seed-borne disease, the precaution was taken to test out the varieties in a locality where tobacco is not commercially grown. There was, however, no evidence of disease, consequently supplies of seed are being secured for the carrying out of trials in the respective tobacco districts during the coming season.

In addition to the forty varieties referred to, some 130 crossbreds were made last season between cultivated varieties and more hardy, recently introduced types having one or more undesirable characteristics, the objective being to combine robustness with quality in the resultant progeny. Although a number of very promising new types have been evolved, further propagation and selection work is essential for the fixing of the desired characteristics.

Classification of Varieties.—It is essential that in order to maintain purity of type in tobacco varieties, some standard of reference should be available to those directly engaged in the industry. As far as I am aware no classification of varieties has been published to date. In an endeavour to supply this need the compiling of a detailed description of all varieties growing in Queensland was entered upon during the year. To make this work as informative as possible, photographic illustrations of 26 varieties have been included, together with numerous illustrations of the various distinguishing characters upon which the classification is based. Several recent introductions will be dealt with during the coming season.

Blue Mould Investigation.—Notwithstanding the enormous damage accruing to the industry through the incidence of Blue Mould, very little has been done to combat the menace by the breeding of a disease-resistant variety.

The possibilities of producing an immune type by crossing is indicated by the fact that attempts made to artificially infect wild tobacco with Blue Mould have failed. Investigation in this direction was commenced during the early summer months by the propagation for crossing purposes of the native wild tobaccos. *N. megalosiphon* and *N. australis,* together with eighteen cultivated varieties of widely divergent characteristics. Some hundreds of crosses were made between the respective types from which a considerable number of fertilized seed capsules are being harvested. The behaviour of the progeny from these widely divergent crosses when subjected to Blue Mould infestation will be of considerable interest to the industry.

Fertilizer Trials.—The type of soil in which tobacco is grown in Queensland necessitates the application of heavy dressings of costly fertilizer. Any excess over the actual requirements of the crop is not only wasted, but may also detrimentally affect the yield as well as the quality of the leaf. The trials arranged for in each of the tobacco-growing localities are intended to demonstrate the most suitable mixture to apply for the widely different types of soil, rainfall, and temperature, to be met with in the respective tobacco-growing districts which are hundreds of miles apart. The results of these tests have not yet been finalised.

Seed Propagation.—In order to provide pure seed of certain varieties sufficient to meet Queensland requirements, three one-quarter acre plots were established at Archer, Bajool, and Alpha respectively. The sorts grown are Jamaica, Bonanza, and Conqueror. Heavy crops of seed are being harvested from the Jamaica plot at Archer and the bonanza plot at Bajool. As a result of the extreme heat and absence of rain no seed will be procurable from the Alpha plot.

The future prospects of the tobacco-growing industry in the Central district are largely dependent upon the incidence of blue mould. In the event of the seed-beds escaping a visitation of the disease, a fairly considerable expansion in the area planted next season may be looked for.

Pasture Improvement.—Although the activities of this branch were largely taken up with matters relating to the tobacco industry, the improvement of our grass lands, more particularly in districts where dairying is the main occupation, was by no means overlooked.

The trial plot at Scrubby Creek some years ago was extended in order to provide increased supplies of material for extension work. A number of new varieties have also been added to the collection. A nursery plot was established in the vicinity of Mackay for the propagation of material for the carrying out of trials in that district.

It is somewhat unfortunate that several promising sorts under observation do not produce viable seed and have in consequence to be propagated by roots or sets. This mitigates against their establishment where large areas, more particularly scrub burns, have to be quickly put under grass.

The behaviour of a grass in a small scale plot is very often misleading and cannot be accepted as to its grazing value in the paddock.

The so-called wild lucerne, *Stylosanthes sundiacea,* continues to spread into new localities along the coast, maintaining its reputation as a valuable fodder plant.

A recent introduction from Brazil—*Stylosanthes guyanensis*—is a more robust grower than the *S. sundiacea,* and moreover has the advantage of being perennial in habit. The seed came to hand late in the planting season with the result that an early frost destroyed the seed capsules prior to maturity.

English Potatoes.

Excellent crops of potatoes have been harvested in the Boyne and Scrubby Creek localities. Very little attention has so far been given to the production of this important product in the northern end of the Central Division. Recently large areas of country have been made available for general farming purposes on the fringe of the sugar area, embracing Bolingbroke, Blue Mountain, and O'Connell River. To determine the most suitable variety for these particular areas comparative trials have been arranged at both Blue Mountain and the O'Connell River. The varieties selected for the test are Brownells, up-to-date, carmen, and Bismark. A very satisfactory germination resulted in both plots, but harvesting will not be completed in time to permit of the results being embodied in this report.

Broom Millet.

A trial area of 1 acre in extent was planted with a dwarf variety on the farm of T. M. Rasmussen, The Caves. Notwithstanding that climatic conditions were, on the whole, adverse to growth, a fairly satisfactory crop was secured. Although the average height of the plants was 4 feet, against 8 feet of the white Italian growing alongside, the fibre of the dwarf was longer and of better average quality. As a result of the

drought conditions prevailing in the west, the crop was invaded by hordes of parrots, making it difficult to secure seed supplies.

Italian Sorghum.

The 1 lb. of seed received was planted on the farm of J. Edmiston, Pink Lily. As only 1 inch of rain fell during the growing period, development was undoubtedly restricted. The stalks, which attained an average height of 4 feet 6 inches, were free from pith, and carried a heavy crop of seed, a bushel of which was secured for further propagation work.

Peanuts.

The area under crop showed a very appreciable increase over that of previous years. The absence of the usual summer rains affected yields to some extent, but on the whole a satisfactory crop is being harvested.

Fodder Conservation.

Demonstrations were given in the conservation of fodder in the form of silage in several districts. As a result of the dry conditions experienced during the summer months, the acreage under maize, sorghums, panicums, and millets was a good deal under the average.

NORTHERN DIVISION.

Mr. C. S. Clydesdale, Senior Instructor in Agriculture, reports:—

Throughout the year seasonal conditions have been most unfavourable both from a pastoral and agricultural standpoint.

The excessively dry period from November to June is regarded by many of the old residents as the severest on record. The usual summer precipitations were well below the average and in December only 47 points were registered, the lowest since 1923.

Scarcity of rain and excessive heat during the summer caused considerable mortality among stock. In the western districts hand feeding became necessary, and many flocks had to be removed to relief country.

RAINFALL.

Months.	Townsville.		Woodstock.		Bowen.		Mareeba.		Dimbulah.	
	Wet Days.	Points.	Wet Days.	Points.	Wet Days.	Points.	Wet Days.	Points.	Wet Days.	Points.
1934.										
July	2	42	10	97	4	32	3	29	4	12
August	2	25	4	14	3	59	1	4	3	12
September	1	10	5	60	5	67	..	34	2	43
October	2	40	7	88	3	44	1	15	3	7
November	8	512	15	171	7	213	7	239	8	447
December	2	47	6	24	4	150	..	28	1	4
1935.										
January	4	154	7	173	6	233	8	373	11	407
February	5	167	6	296	6	498	7	502	8	336
March	8	235	8	171	6	262	10	855	9	373
April	2	32	5	11	6	173	..	69	5	47
May	5	154	4	138	6	182	..	217	4	197
June	4	11	3	35	1	7	1	5	2	53

The supply of cattle for the meatworks this season is estimated approximately by the District Stock Inspector as follows:—Merinda Meatworks, Bowen, 20,000; Alligator Creek, Oolbun, 36,000; Ross River, Townsville, 36,000.

Dairying.

Considerable interest is now being taken in the dairying industry in the Northern Division, more especially around Cardwell, Tully, Kennedy and Silkwood districts, and the advance of settlement in Clump Point and Palmerston areas should lead to further dairy production.

Seasonal conditions on the coastal districts have been more favourable from a dairy point of view, in so far as the rainfall has been light and the grasses have not produced that rankness associated usually with normal Northern wet seasons.

Tobacco.

The number of growers and the approximate acreage planted and the estimated yields of leaf are as follows:—

Sub-District.	Number of Growers.	Approx. Acreage.	Estimated Amount of Leaf—lbs.
Woodstock	22	70	11,200
Hervey's Range	11	40	5,600
Charters Towers	4	9	7,840
Ravenswood	1	4	4,480
Ingham	1	10	6,720
Argea	1	5	2,240
Sellheim	2	4	2,000
Collinsville	5	14	4,200
Bowen	15	100	35,000
Home Hill	4	13	3,900
Inkerman	2	6	1,500
Mareeba	430	1,500	336,000
Dimbulah	143	1,000	448,000

Fertilizer Trials.—Experiments were carried out at Hervey's Range which embraced different fertilizer mixtures, together with different methods of application. The trials comprised ten plots each one-tenth of an acre.

No. of Plot.	Fertilizer Mixtures. N. P. K.	Quantity of Fertilizer.
		lbs. per acre.
1	3 8 5	320
2	4 8 6	320
3	3 10 9	320
4	4 12 6	320
5	Control	..
6	3 8 5	480
7	4 8 6	480
8	3 10 9	480
9	4 12 6	480
10	Control	..

No. 4 Plot fertilizer was broadcasted over a strip of land approximately 18 inches wide, while on No. 9 the fertilizer was broadcasted over the whole area.

The land selected for this trial was of a sandy nature, identical with most of the soil utilized for tobacco growing throughout this district. Following are the particulars:—

No crop had been grown on this site for three years. Ploughed early in February (1934) and sown with Sudan grass. Crop made fair growth, and was ploughed under in May. Land kept in good order during the remainder of the season and in November was ploughed again, disc cultivated and harrowed.

Fertilizer was applied on 7/12/34 and planting out in the field was commenced 17/1/35, when good conditions prevailed. Stem borer made its appearance early, necessitating the cutting back of a large percentage of the plants, resulting in an unevenness throughout the plot. Finalised on 25/6/35.

Summary.—The leaf in the bulks could not be classed as good. The earlier pickings produced a fair quality leaf, but a rapid decline to leaf of poor quality led to the abandonment of harvesting whilst a percentage of leaf still remained in the field. To obviate any seeming injustice to any one of the fertilizers, a percentage estimate of the leaf on each plot was added to the actual weight of leaf harvested.

The apparent causes of the failure of the crop in the later stages were (1) mosaic; (2) small plants making a late growth of coarse green leaf; (3) cold weather with its tendency to toughen up the cellular tissues (4) abnormal period of growth.

These plants have been in the field for practically five and a half months and are uncurable, giving a large percentage of green and worthless leaf, while the small percentage of dark mahogany made it inadvisable to continue with this work.

After weighing and estimating the percentages left in the field the following results have been tabulated:—

No. of Plot.	Fertilizer Used. N. P. K.	Rate of Fertilizer per Acre.	Actual Weight Cured.	% Uncurable Left in Field.	Yield per Acre.
		lb.	lb.		lb.
1 ..	3 8 5	320	75	*15	860
2 ..	4 8 6	320	95	5	990
3 ..	3 10 9	320	76	10	840
4 ..	4 12 6	320	91	2	930
5 ..	Control	..	87	2	890
6 ..	3 8 5	480	80	2	820
7 ..	4 8 6	480	42	*15	480
8 ..	3 10 9	480	56	*15	640
9 ..	4 12 6	480	40	*20	480
10 ..	Control	..	35	10	380

* Denoted—infection with Mosaic, also large percentage of small plants.

Tobacco Seed Selection Plots.—With a view to raising increased supplies of pure seed of the standard varieties of tobacco now in general cultivation, small plots were established at Townsville with the following varieties: Hickory Pryor, Yellow Pryor, Cash, Warne, Gold Dollar, Gold Leaf, Jamaica, Bonanza and Conqueror.

The land selected for these trials was of a very light sandy nature, having a deficiency of humus. To improve this deficiency a heavy dressing of farm-yard manure was applied. The land was prepared early in September and was in good order for the reception of the plants, but lacking subsoil moisture. Seed-beds were sown on the 17/10/34. Germination very irregular, so much so that half the seed-beds were resown on 6/11/34.

Planting out was commenced 3/12/34, and it was not until 26/1/35 that all varieties, with the exception of Hickory Pryor, was established. The conditions prevailing in the early stages of the plants' growth necessitated assiduous attention to detail, and unrelenting effort countered the effects of the dry weather. With a fair supply of water available the plants made fair growth, although some of the varieties lacked vigour and general development usually associated with plants for seed purposes.

It has since been found necessary to rogue cut some of the plants due to this cause. The remaining plants are free from disease. Harvesting of the plants has been completed, and it is anticipated that some excellent quality seed should be forthcoming.

Tobacco Seed Propagation Plots.

1934 Season.

Experiments were carried out in the Pentland district last season with the Gold Leaf and Warne varieties. These were not completed until the latter end of October. The returns of seed obtained from these varieties are as follows: Gold Leaf, 1,504 ounces; Warne, 160 ounces.

Toward the end of harvesting heavy frosts were experienced. Cutting back the remaining leaves on the plants had no effect on the remaining seed in the field. Germination test made gave 91 per cent.

1935 Season.

Further arrangements were made for an eighth of an acre of land for the continuation of seed propagation plots this season. The varieties planted were: Bonanza and Jamaica.

Seed-beds were sown on 27th and 28th October respectively, resulting in good germination. Rapid growth was made by the young plants in seed-beds, and were ready for transplanting in five weeks. Prior to planting out in the field, the land was fertilized with superphosphate at the rate of 160 lb. per acre. Dry hot conditions made it necessary to irrigate before planting. Unfortunately, these conditions prevailed for a long time, causing many of the young plants to die off, and necessitating replanting.

Both plots were established towards the end of January, each containing approximately 800 plants. Good progress was made by both varieties but, unfortunately, the Bonanza variety had to be abandoned on account of heavy infestation of mosaic disease.

Jamaica.—This variety showed exceptional growth, plants averaging from 6 to 7 leaves of good size and fine quality. Plants throughout this plot showed trace of mosaic; these were carefully rogued out while the remaining plants were free and showed no traces of any other disease.

From this plot it is expected that some good quality disease free seed should be forthcoming.

Tobacco Green Manurial and Fertilizer Trials.—These experiments were inaugurated last season, with a view to testing out the relative value of the different classes of green manures.

At Hervey's Range, Woodstock, Mount Aberdeen, Inkerman and Charters Towers, areas were set aside and well prepared.

Inkerman.—Owing to unfavourable conditions prevailing throughout the planting period, it was decided to hold over the sowing until this season.

Decomposition of the Sudan grass was rather slow, due to the lack of rainfall, while the cowpeas were quicker in this respect. At each centre the subsequent preparation of the land for the reception of the crop was very thorough.

Hervey's Range.—Planting was carried out during the second week in January. Soon after planting, stem grub caused considerable damage, necessitating the cutting back of a large percentage of the plants. This, coupled with high temperatures and dry conditions, was responsible for a severe check, from which the plants never recovered.

Harvesting was commenced on April 23rd, and finalised on 25/6/35.

In this experiment, a percentage of leaf was left in the field, due to the following causes: (1) Mosaic disease; (2) small plants making a late growth of coarse green leaf; (3) cold weather with its tendency to toughen up the cellular tissue; (4) abnormal period of growth.

The plot was divided into three sections, one third of an acre each of cowpeas, Sudan grass and Mauritius beans, with half of each containing an application of superphosphate at the rate of 200 lb. per acre.

In reference to the leaf harvested, those sections with superphosphate grew normally and produced a bright coloured leaf of good texture, but showed a rapid deterioration in quality after the first three pickings.

The unfertilized half grew very poorly and unevenly, and very little leaf has been harvested.

It will also be noted that the Mauritius beans did not germinate, hence will give no indication of value as green manure. The plot was used as a control plot to the cowpeas and Sudan grass. Weights taken are as follows:

Green Manure.	Actual Weight Cured Leaf	% Uncurable Leaf Left in Field.	Amount in lbs. per Acre.
	lbs.		
Cowpeas	27	60	260
Sudan Grass	34	60	320
Control	15	70	250
Cowpeas and Super ..	75	15	520
Sudan Grass and Super ..	83	15	570
Super Control	38	50	340

Mosaic disease was also very prevalent in this plot, especially in the late maturing plants. The difference between the plots with superphosphate and the remainder of the tobacco is very marked and a beautiful yellow sheen was observed right through the area, in contrast to a dull green of a neighbouring row without superphosphate.

Major's Creek, Woodstock.—Planting out was delayed through lack of moisture. Good rain was experienced towards the end of February, when planting was commenced. Unfortunately, the plants showed a very heavy infestation of stem grub; so much so that difficulty was experienced in getting sufficient plants for this plot. Dry, hot conditions followed and the losses were heavy, replanting followed, but no success was obtained. As the season was getting late, it was decided to abandon this experiment.

Charters Towers.—This area was not planted up with cowpeas, Sudan grass and Mauritius beans until late in August (1934). Germination of cowpeas and Sudan grass was good, but Mauritius beans failed. Growth was very slow in the early period, due to the cold conditions prevailing. When conditions improved the cowpeas and Sudan grass made progress, and produced a good cover crop. Ploughed under towards the end of November.

Planted up with tobacco late in February, the crop has made good growth and is most promising. It is estimated to produce 1,000 lb. of leaf. Harvesting commenced about 14th June and the early-cured leaf is of excellent quality.

There is no apparent difference in the growth of the plants on the cowpea and Sudan areas. Yields from the respective plots will be computed at the termination of the curing.

Mount Aberdeen.—The area selected for this trial is of a light sandy nature, having previously grown tobacco. Crops were planted on 6/4/34. Cowpeas and Sudan grass made good growth; Mauritius beans failed. Ploughed in on 21/6/34, followed by a light harrowing and subsequent working brought the land in a good tilth for the reception of the crop. Fertilized with superphosphate and hilled.

Planted on 28/2/35 with Cash variety. The crop showed good progress during the early period, but adverse weather conditions experienced in this district has greatly reduced the yield. Curing operations are in full swing and approximately two-thirds of the leaf of this crop harvested. Inspection of the bulk shows that bright leaf of good quality is being obtained. When completed, weight and grades will be obtained.

Varietal Trials with Tobacco.—In conjunction with other plot work experiments were arranged for, with ten different varieties of tobacco under the randomised plot system.

The varieties used were: Hickory Pryor, Yellor Pryor, Cash, Warne, Jamaica, Gold Dollar, Bonanza, Gold Leaf, Conqueror, and Yellow Pryor.

Woodstock.—Seed-beds were prepared early in the season and sown on the 16th November. Plants made good progress and every precaution was taken against insect attack and disease. Systematic spraying with blue stone and soft soap mixture was carried out, and plants made good vigorous growth with freedom from disease. This experiment was on medium light sandy loam. It was well prepared, but lacked subsoil moisture.

On January 18th the land was hilled up and fertilized with 4-12-6 mixture at the rate of 320 lb. per acre. Light rain commenced to fall on the 21st January and planting out was commenced and on 22nd, when half the area was planted, conditions changed completely and dry hot winds followed. These conditions caused heavy losses to this area and to all other tobacco planted out in the district. Conditions did not change until February 22nd, when good rains were experienced. The plants in the seed-beds were then fifteen weeks old. Every endeavour was made to hold these plants, but in doing so, the infestation of stem borer and leaf miner was so severe that the supply of plants became scarce, and what remained were of little value. Eventually this plot had to be abandoned on this account.

Mount Aberdeen.—Good progress was made by the plants in the seed-beds and planting was carried out on February 9th. Conditions following the planting were adverse, which necessitated re-planting. The general appearance of the crop indicated that the plants had received a severe check and only averaged 3ft. 6in. in height. Harvesting was commenced on 15th May and at time of writing four pickings made.

The only varieties that are showing any promise, after curing, are Cash and Gold Dollar. All other varieties show a very large percentage of dark green, to such an extent that they are considered to be of little value. The leaf in the field is now becoming coarse and mottled, and with the cold weather that is being experienced will increase the many curing difficulties.

Maize.

Owing to the dry weather during the growing period and the patchy storms on the Atherton Tableland the maize crops planted in December suffered considerably. The Maize Board estimate that the harvest from this crop will approximate 12,000 tons.

Owing to the heavy demand for maize for sheep feeding in the western districts of Queensland the last of the 1933-34 crop was marketed by the end of April last. With the continual demand for maize the Board opened the silos to receive and dry maize early in May, this being the earliest opening period since the inception of the pool.

The amount paid to growers per ton to date for the 1933-34 crop was £4 5s., and it is expected that another 15s. will be paid, making a total payment of £5 per ton. The gross tonnage handled by the Board was 5,294 tons and the net tonnage, allowing for offal deductions, shrinkage, &c., was 4970 tons. Of this present crop (1934-35), the Board has received to date 1,096 tons and have sold 947 tons. The approximate area under crop this season is 18,000 acres and the quality of grain is considered as excellent.

Cowpea Trials.

Experiments have been conducted in the principal tobacco growing districts with new cross-bred cowpeas raised by Mr. R. E. Souter, Manager, State Farm, Bungeworgorai. The object of these experiments was to raise additional supplies of seed and test their behaviour as to nematode resistance.

The trials were arranged in four of the principal tobacco-growing areas, viz.:—Collinsville, Dimbulah, Biboohra, Mareeba, and Charters Towers. Farmers co-operated by providing the necessary land and assisting in the cultivation and harvesting of the crop.

Dimbulah.—Varieties were planted on sandy loam country. Only six of the ten varieties were planted. Large White x Skewbald x Poonah Sel 2, New Era x Poonah, Snake and Poonah Sel 2, and New Era x Poonah x Mammoth Sel 1 being found to be too weevil-infested for planting.

Excellent strikes were obtained, and all varieties showed good promise with a capacity to produce luxuriant growth. Frequent harvesting of the pods of the several varieties has been carried out so that as much seed as possible will be saved for further trials on a larger scale next season.

Mareeba.—At Biboohra five of the varieties were planted on red granite sand soil on 23/1/35, and harvested on 15/5/35. Exceptionally heavy growth was made by Large White x Skewbald x Poonah Sel 1, Large White x Skewbald x Poonah Sel 2, and Large White x Skewbald x Poonah Sel 3, whilst the other two varieties—Large White x Skewbald Sel 1 and Large White x Skewbald Sel 2—did not produce such a robust growth.

All varieties showed good capacity to produce grain. Careful inspection was made of the root system for nematodes and only slight traces were noticeable on the Large White x Skewbald Sel 2 variety.

At Mareeba, five varieties were planted on a grey sandy alluvial soil. Planted in January when conditions were very promising and good moisture present the germination was good, and plants got an excellent start. Hot dry conditions during February appeared to affect the growth; so much so that only a light foliage

was produced. Good supplies of seed were harvested, for a more extensive planting of these varieties next season.

Charters Towers.—Mr. A. Falsett set aside an area of land comprising a medium dark sandy loam on the banks of the Broughton river, where irrigation (spray system) could be applied if required.

Dry hot conditions prevailed prior to planting. To ensure a satisfactory germination, the spray system was brought into commission after planting dry. Excellent results were obtained. Several waterings were necessary, due to the unfavourable conditions that prevailed throughout the growing period. The crop made good growth, although not producing such a luxurious growth as is usually expected from this legume. Seed was harvested from all varieties.

Collinsville and Bowen.—All varieties planted succumbed to the attack of bean fly.

Description of varieties.—(1) Large White x Skewbald x Poonah Sel 1.—Large plants with broad leaves, foliage dark green in colour; stem, green with 50 per cent. red, medium thickness; recumbent growth with long branching laterals; height, 24 to 26 inches. Pods, medium to small, brown in colour, and well filled. Seed, oval, medium size, white in colour, medium yielder. Flower, white with tint of purple on edges of lower petals and creamy yellow at base of upper petals. Showing slight traces of rust. No sign of nematodes.

(2) Large White x Skewbald x Poonah Sel 2.—Large type of plant, with plenty of dark-green foliage; heavier producer than Sel. 1; stem, green with large amount of red of medium thickness; recumbent growth with long tapering branches; height, 24 to 26 inches. Pods, medium length, brown in colour; well filled. Seed oval, medium size, white, fair yielder. Flower, white tinted with purple on bottom of petals, creamy yellow at base of upper petal. Slight trace of rust and no indication of nematodes.

(3) Large White x Skewbald x Poonah Sel 3.—Similar to Selection No. 2.

(4) Large White x Skewbald Sel 1.—Small squat plant, bushy in appearance with fair amount of dark green foliage; height, 12 to 14 inches; stems, coarse green with fair amount of red; upright grower. Pods, medium to large with well-developed seed, brown in colour. Seed large rectangular and white in colour; flower, white with purple tint and yellow underneath upper petals. Showing slight traces of rust. No nematodes present.

(5) Large White x Skewbald Sel 2.—Similar to Selection 1.

(6) Large White x Skewbald x Mammoth Sel 1.—Crop shows green foliage, late maturing and with a pronounced purple colour. Height, 20 to 22 inches. Pods are long and very large; inclined to be a shy bearer. Procumbent, coarse growth.

(7) New Era x Poonah x Mammoth Sel 1.—Crop averages 12 to 14 inches in height, squat appearance with a plentiful growth of small dark green foliage; stems fine, green in colour, with occasional red showing. Seed pods, short, fine and well developed, brown in colour. Seed small, oval, dark brown and speckled white. Flower, pink with purple tint on bottom of petals.

(8) New Era x Poonah Sel 1.—This variety shows a dense mottled procumbent habit of growth; height from 20 to 24 inches. Leaves very small, also pods; medium early maturing, and foliage light green in colour. This variety failed at Bowen, Charters Towers and Dimbulah.

(9) Snake x Poonah Sel 1.—Good appearance, fair amount of light green foliage and heavy seeder; height, 12 to 15 inches; stems, coarse green, with reddish patches and red streak along main stem and laterals. Semi-procumbent with medium length laterals. Seed pods, very long, and well filled, white in colour; seed small, kidney-shaped, brown and flat.

(10) Snake x Poonah Sel 2.—Similar to Selection 1.

Peanuts.

This crop on the Atherton Tableland did not suffer in comparison with other crops to any great extent from the dry conditions prevailing. The heaviest portion of the crop was produced from Tolga to Carbeen.

In the Mareeba and Dimbulah areas, the crop was practically a failure, due to dry weather. The area planted was approximately 800 acres, and the estimated yield is 300 tons. The quality in general is much superior to that of the crop of the previous season. Harvesting is well advanced in favourable weather.

Cotton.

The area under cotton at the present in the Mareeba district is very small, and would not amount to more than 50 acres. The reason for this reduction is due to the fact that the harvesting coincides with the harvesting of tobacco, and farmers find it more profitable to confine all activities to tobacco. The quality of this season's crop of cotton is considered to be very good.

Varietal Trials.—This experiment was carried out at Mareeba on a semi-volcanic soil. The area of the plot was half an acre, and the varieties used were Lone Star, Mebane, Cliett and Rowden. Despite adverse weather conditions, all varieties made good growth and a good comparative trial will be obtained. Harvesting operations are being carried out.

Sorghum.

Small trials were carried out with three varieties of sorghum, two of which were introduced recently from the Bureau of Plant Industry, Washington, and one from Italy. They were planted at Mareeba, Dimbulah, Bowen, Townsville and Pentland.

Although grown under adverse weather conditions the results were most promising and gave every indication of good seed-producing varieties.

Description of Varieties.

Day Milo—(Bureau of Plant Industry, Washington).—A short growing variety, good stooling, produces a fairly open type of head and should yield well. Medium-early grain of medium size, and of a distinct reddish-brown colour.

Club Kaffir—(Bureau of Plant Industry, Washington).—This variety does not show the same promise as Day Milo. Short growing, head compact, and grain white and of medium size.

Sorghum—(Introduced through Agent-General, London; source, Italy).—A saccharine variety, tall growing, good stooling, and fair yielder; appears to be identical with the saccaline variety; grain of medium size, and dark red in colour.

From these plots, seed has been selected for further extension work during the coming season.

NALI NUTS.

Small quantities of Nali nuts (canarium sp.) were received from the Solomon Island Development Company for trial. Arrangements were made to plant up a small area in the Innisfail and Kuranda districts.

PASTURE IMPROVEMENT.

During the season under review, pasture improvement plots were extended to the Northern Division, where considerable attention is now being given to the possibilities of dairying. The opening up of the new lands at Clump Point and the Palmerston areas should give an impetus to the dairying industry.

In conjunction with this work, plots have been established in the Mareeba, Mossman, Daintree, Tolga, Kennedy and Bowen districts.

The varieties used are: Panicum coloratum, Urochloa pullulans, Panicum antidotale, Urochloa tricopus, Urochloa sp., Setaria aurea, Eragrostis cervula, Panicum maximum (fine-stemmed Guinea), Digitaria eriantha, Digitaria polevansii (Kuriman strain), Digitaria polevansii (Inkrup strain), Digitaria valida, Digitaria pentzii, Cynodon plectostachyum.

At Daintree, the grasses have shown wonderful promise. The outstanding varieties are: Panicum coloratum, Urochloa pullulans and three digitarias—polevansii, valida and eriantha.

At Bowen, the blue panic (Panicum antidotale) and fine-stemmed Guinea varieties have shown good promise, and have been cut for hay. They are apparently very popular with the farmers who have interested themselves in these experiments.

Planted out from rootlets on 14th March last, blue panic has yielded three cuttings, the last of which, cut on 18th June, yielded 2 tons 14 cwt. 1 qr. 22 lb. of green fodder per acre.

Fine-stemmed guinea, planted on the same date, gave two cuttings; and the last cutting, made on 18th June, gave a return of 2 tons 8 cwt. 2 qr. 13 lb. green fodder per acre.

Cynodon plectostachyum has spread to remarkable dimensions, for it has, from meagre rootlets, extended to a general width of 6 feet and has made fresh vigorous growth since the cool weather commenced. From its behaviour it should be confined to areas not required for cultivation.

The other varieties have made good growth, but the three mentioned are the most promising to date.

The subsidised plot at Woodstock has served a useful purpose, in so far that we have been able to draw our supplies from this area. Unfortunately, in this district seasonal conditions have been so adverse that very little progress has been made. During February, the area was put in order, and extension work carried out, but this work was nullified to a certain extent as some of the varieties which had been extended died out. Throughout the dry weather the most outstanding variety was Panicum antidotale, which never showed any set back after being transplanted. Small supplies of seed of this variety have also been collected.

At Townsville, a small area was set aside with the object of giving particular attention to the four new varieties of digitarias received from Mr. G. B. Brooks, Senior Instructor in Agriculture at Rockhampton. These varieties have made good progress and planting material has been obtained for other plot work.

Panicum muticum (Fine-stemmed Guinea).—Extension of this plot has been carried out during the year and it is now well established, despite adverse weather conditions. It has a robust habit of growth and produces a large bulk of succulent feed.

Digitaria eriantha.—This grass is now well established, has spread all over the plot, and making original rows barely perceptible. It withstands hot, dry conditions very favourably and comes away well with good growth after light showers of rain. The flower heads are infertile, hence its only mode of increase is by the numerous runners which it producers. Easily established.

Digitaria pentzii.—Small quantity of rootlets were received from Rockhampton on 1/3/35 and the variety has since established itself in the plot with an abundance of soft and succulent green foliage. The rapidity with which this grass spreads, and its response to light rains ensure it a prominent position in our northern grazing areas.

Digitaria polevansii (Kuruman strain).—This grass, which was received from Rockhampton on 1/3/35 under similar conditions to the other digitarias in the consignment, has not responded nearly as well. It has not the same tendency to spread and the growth is more of a stooling type, whereas the other varieties produce numerous runners and spread rapidly. It is considered that under heavier rainfall than has been experienced it would show greater promise.

Digitaria valida.—Rootlets received from Rockhampton on 1/3/35 have shown the best growth. It produces an excellent growth and is palatable fodder. It is very responsive to light rain and withstands dry hot conditions, spreading very rapidly. It should withstand grazing reasonably well, and should be a popular bulk constituent of future grazing paddocks when its efficiency for this purpose becomes known.

Digitaria polevansii (Inkrup strain).—This was also received on the 1/3/35 from Rockhampton and is making a fairly good response to local conditions. As with Digitaria polevansii (Kuruman strain) this type does not yield such an expansive set of runner, but tends to grow in stools with only an occasional runner. However, it has grown creditably, but will not adapt itself to field conditions for grazing as well as valida and pentzii.

Panicum coloratum.—This grass covers most of the area at Woodstock for pasture improvement plots. It produces a very heavy growth of green palatable food, standing from 4 ft. 6 in. to 5 ft. in height. It is a very rapid grower, inclined to coarseness after seeding, but this should be reduced by constant grazing.

Urochloa pullulans.—This is a smaller type of grass only growing about 2 ft. to 2 ft. 6 in. in height, carrying a large percentage of flag, but the stems have a tendency to be woody and tough on maturity. It stools very well. Some success has been attained with this variety in the wetter districts.

Panicum antidotale (Blue Panic).—This has been re-established quite recently in the plot and has withstood the prevailing adverse conditions very well. It is inclined to rush into tall growth, and then only produces small amount of foliage with woody stem which is unpalatable; but if grazed in the earlier stages is quite succulent. It seeds very freely. Easily established with rootlets.

Cynodon plectostachyum.—This is showing good promise and producing succulent light green foliage. It is strong growing, and appears that once established it would take complete control, and this characteristic suggests that it should be kept well away from cultivated areas; growth about 12 inches in height and just commencing to seed.

Hyperrhenia rufa.—This grass has not shown any great promise up to the present and, on account of the limited quantities of rootlets available and the adverse conditions prevailing, extension work with this variety has not been attempted. The grass is in small plots at Charters Towers.

Urochloa trichopus.—This is not nearly so robust as pullulans, but similar in characteristics. Foliage dark green, broad flag; a spreading habit.

Setaria aurea.—This grass has been re-established recently in plot, but is not showing any great promise. It does not withstand dry conditions. Under favourable conditions, it produces plenty of growth, but as a fodder grass is eaten rarely by stock.

Eragrostis cervula.—This is a rather small type of grass growing in clump form; foliage very fine, and inclined to be hard. Stock do not seem to relish this grass.

Andropogon distachys.—This is medium tall growing variety, averaging 3 ft. to 3 ft. 6 in., producing thin but hard stems. Stools fairly well, but stock are impartial to it.

Urochloa sp.—Extension work was carried out with this variety, and since replanting it has not re-established itself. Similar characteristics to Pullulans.

In addition to the Pasture Improvement Plots established throughout the Northern Division, keen interest has been taken by numerous farmers in the improvement of their pastures and in the experiments with the different varieties. About 45 parcels of rootlets, together with 20 odd lots of seed, have been distributed.

ONION TRIALS.

Some success has been achieved with the onion growing experiments conducted last season on the Evelyn Tableland, and arrangements have been made for an extension of this work during the coming season.

The conditions governing the experiments conducted last season were such that the germination of the seed was very unsatisfactory, and the abnormally wet season experienced proved detrimental to the final results. This season areas comprising ½ acre each have been made available and the varieties to be used are: Early Hunter River Brown Spanish, Extra Early Golden Globe, White Imperial, New King. Some of these varieties have proved successful in the onion growing districts of Queensland and until some more data are available concerning soil types, planting periods, &c., the suitability of this crop to the district, and whether onions of good quality and good keeping can be produced, has yet to be determined.

ROMA STATE FARM.

Mr. R. E. Soutter, Wheat Breeder, reports:—

Weather conditions during the first four months of the period under review were comparatively dry, and, consequently, the winter cereal crop was affected adversely. At the end of November and during December and January excellent rains were recorded, with the result that all waterholes, dams, and creeks were in nearly all instances filled to overflowing and pastures showed remarkable growth. Since then no useful falls occurred, and in consequence surface water is now practically non-existent and pastures became so dry as to prove almost unpalatable to stock.

Wheat Sowings, 1934.

Manurial Tests.

Sown 6th June; harvested November (first week); rate, ½ bushel to acre; germinated 15th June; variety, Bunge No. 1.

	Manure Applied and Rate per Acre.	Cost.	Average 19 Years.	Yield 1934.	Remarks.
		s. d.			
1	1 cwt. Shirleys Cereal Manure ..	10 0	15·8	8·6	Extra moisture was lost through teams turning on this block when breeding section was being worked.
2	1 cwt. Shirley's Cereal Manure ..	10 0	17·1	9·0	Soil slightly better than in block No. 1.
	½ cwt. Nitrate of Soda	7 11			
3	½ cwt. Cereal Manure	5 0	18·3	10·6	Soil little more loamy than 1 and 2.
	½ cwt. Nitrate of Soda	7 11			
4	Unmanured	Nil	15·6	10·1	Soil similar to 3.
5	1 cwt. Superphosphate	5 6	17·1	10·7	Loamy soil.
6	1 cwt. Basic Slag	10 6	16·4	9·6	Loamy soil.
7	5 tons Stable Manure	25 0	16·1	5·1	Soil little irregular. Crop flaggy.
	½ cwt. Superphosphate	2 9			
8	½ cwt. Superphosphate	2 9	15·3	7·8	Soil slightly more irregular than in block 8.
	½ cwt. Nitrate of Soda	7 11			
9	½ cwt. Superphosphate	2 9	4·7 bushels	13·7 bushels	Soil in this block of poor physical condition.
	½ cwt. Sulphate of Potash	9 3			
	½ cwt. Nitrate of Soda	7 11			
10	½ cwt. Dried Blood	5 4	8·5 bushels	15·3 bushels	Western end of this block sandy loam; balance of a clayey nature.
	½ cwt. Sulphate of Potash	9 3			
	1 cwt. Superphosphate	5 6			
11	Unmanured	..	7·2	13·8	The poorest block in the series.
12	½ cwt. Dried Blood	5 4	9·7 bushels	16·0 bushels	Slightly better than 9, 10, and 11.
	½ cwt. Sulphate of Potash	9 3			
	1 cwt. Basic Slag	10 6			
13	½ cwt. Dried Blood	5 4	7·2 bushels	15·1 bushels	Slightly better then 9, 10, and 11.
	½ cwt. Sulphate of Potash	9 3			
	1 cwt. Superphosphate	5 6			
	½ cwt. Nitrate of Soda ..	7 11			

Two-acre Blocks.

The soil on blocks 1, 2, and 3 is very clayey; 4, 5, and 6 are better situated, as the soil on these is of a more loamy nature; nevertheless, the yields are fairly even, due in a measure to the fact that the land had been subjected to a long fallow.

Blocks similar in character situated just across the drive cropped the previous season under the dry conditions made very poor growth and gave a return of about 6 bushels to the acre—just about half.

Sown 11th May; germinated June (third and fourth week); rate, ½ bushel to acre; manure, ½ cwt. to acre.

Varieties.	Yield. Bushels per acre.
B.F.G. 2627.—Failed, badly affected by olive trees on two sides	
B.I.P. x M. 2610.—Straw very short ..	13.3
C.C.C. 2704 (Seaspray).—Crop very thin	11.5
Novo	12.28
Pusa x C.C.C. 3216	13.7
Pusa x Flora 3216	13.8

Quarter-acre Blocks.

Cropped 1933; ploughed twice, cultivated once, and harrowed four times; sown 29th May; rate, ½ bushel to acre.

Artificial manure applied at rate of ½ cwt. per acre; harvested November (first week).

Dry spell affected slow-growing varieties considerably and also those situated in blocks on clayey situations, whether quick or slow maturing.

	Variety.	Appearance of Grain.	Yield per Acre.
			Bushels.
1.	Reward	Medium poor	10·0
2.	Pusa and Warren 3004	Fair	5·3
3.	Pusa x Gluyas 3002	Starchy fair	7·1
4.	Pusa x Flora 3202	Plump, hard, medium small ..	10·4
5.	Pacific	Large white grain	11·6
6.	Novo	Medium, plump, hard	5·0
7.	Kenya C. 6041	Medium, soft, medium pinched ..	4·6
8.	Gem	Medium, plump, hard	7·0
9.	Flo x Warren 3302	Medium, soft, slightly pinched ..	5·0
10.	C.C.C. 3303	Medium, soft, slightly pinched ..	5·0
11.	C.C.C. 2708	Medium, soft, slightly pinched ..	5·0
12.	B.I.P. x M. 2610	Medium ,soft, slightly pinched	6·0
13.	B.I.P. x M. 12	Ploughed out	Nil

Field Blocks.

Bunge No. 1 Cds.—12 acres; sown 12th April for hay; germinated 20th April; destroyed by grasshoppers; resown May; failed, dry weather predisposing cause.

Pusa and Warren 3004.—7 acres; sown April (second week); destroyed by grasshoppers; resown May; failed, too slow in a dry season.

Seafoam.—1½ acres; sown June; harvested November; very short, weeds grew up through it; yield, 6 bushels; stiff clayey soil.

Seafoam.—5 acres, fallow sandy soil; sown June; harvested November; yield, 13·2 bushels.

Seafoam.—5 acres, fallow heavy soil; sown June; harvested November; yield, 11 bushels.

Seafoam.—9 acres, on flat creek country; fed off, failed.

Three Seas.—1½ acres; sown June; harvested November; soil, stiff clay; yield, 3 bushels.

Three Seas.—10 acres, on flat loamy soil; sown June; failed, dry weather and frost.

Vineyard.

The vines on the whole have done fairly well, more particularly those located in the new vineyard area.

Both the old and the new sections have received a dressing of fertilizer at the rate of 2 cwt. to the acre, which should prove beneficial to the old vines and the young ones recently planted in the old vineyard section.

Satisfactory prices were obtained for fruit marketed, good carrying sorts averaging the highest.

The following varieties grown at the farm are recommended:—

Muscat Hamburg.	Doradillo.
Black Prince.	Henab Turki
Grand Turk.	Purple Cornichton
Waltham Cross.	Gordo Blanco.

Grasses.

Widespread interest has been evinced by pastoralists and dairymen in connection with the Woolly Finger grasses being grown at the farm, due, no doubt, in a great measure to the publicity given them by Dr. Hirschfeld, who has tried them with considerable success on light soils on his property in the Goondiwindi district.

Thousands of rootlets have been distributed and the demand for them still continues.

The three varieties under observation are *Digitaria eriantha, Digitaria Polevansii,* and *Digitaria valida.* Of these the lastmentioned gives promise of being by far and away the best, for not only is it hardy but is a rapid grower and produces large quantities of succulent, leafy material, and there is a possibility that it may under favourable conditions produce seed. As to its growing qualities, our experience was that small rootlets set out in a raw sandy soil in September last, 3 feet apart in a row, have grown into a compact mass 2 feet high from one end to the other, with a width of about 7 feet.

Cynodon plectostachyum (*Budgee Grass*).—This grass, a member of the couch family, is likewise of some considerable promise, and a large number of rootlets have been distributed to different parts of the State.

This grass has not been noticed to seed, although many flowering heads have been observed from time to time, but it rapidly reproduces by sending out runners yards in length.

Panicum antidotale (Blue Panic Grass).—This is a strong, coarse-growing grass which is also suitable for our light sandy soils. According to analysis it possesses a very high feeding value. Unlike the other grasses under observation, this one seeds very freely, and the nature of the seed is such that it lends itself readily to machine sowing.

Rhodes Grass.—This still continues to demonstrate how valuable it is on our light, sandy country, and its suitability over our native grasses found on such locations, which for the most part are harsh wiry types and of a seedy nature.

That it is very palatable to horses if not permitted to become too old before being grazed is very evident from the fact that our horses have kept a small paddock to which they have had access as bare as a board, notwithstanding that there has been plenty of other grass available.

Sorghums.

Grain Varieties.—A sowing was made of thirteen varieties in January on very light soil, and, although no rain of any consequence was experienced afterwards, on the whole they made a wonderful showing which fully demonstrated their suitability as a grain crop for the drier areas on similar soils. Unfortunately, it was impossible to ascertain the relative value of the varieties in this direction owing to the grain being destroyed by birds before it was fully matured.

Variety.	In Ear.	Height.	Width Flag.	Length Ear.	Length Flag.	Stalk.	Remarks.
1. Blackhull		4′6″–5′	4″	21″	11″	Coarse	Compact head, green, fair stooler.
2. Giza		5′–6′	3″	22″–24″	13″	Medium	Fair stooler, open branching head.
3. Reed C. 1628		6′–7′	3″–4″	13″–25″	8″–10″	Medium	White compact head, short, round.
4. Reed C. 1628		4′ 6″–5′	3″–4″	25″–26″	11″	Coarse	Fair stooler, open head.
5. Giza 44		5′–6′	3″–4″	22″–24″	8″–9″	Medium	Good stooler, compact, white.
6. Dwarf Pink		4′–5′	3″–4″	22″–24″	10″–12″	Coarse	Fair stooler, reddish grain, compact ear.
7. Birdproof		7′–9′	3″–4″	28″–30″	12″–13″	Fine	Fair stooler, open branched head.
8. Giza 20		5′–6′	3″–4″	22″–24″	8″–10″	Medium coarse	Good stooler, medium large, white head, round.
9. Giza 16		4′–5′	3″–4″	20″–22″	8″–10″	Medium coarse	White, medium large grain, close head, poor stooler.
10. Brown Yolo		3′–4′	3″–4″	24″–28″	8″–10″	Medium coarse	Mixer.
11. Giza		4′–5′	3″–4″	24″–26″	8″–9″	Medium coarse	Pyramid type head, poor stooler, mixer.
12. Kalo		4′–5′	3″–4″	24″–26″	10″–11″	Medium	Poor stooler, head cylindrical, red grain.
13. Portersburg White		5′–6′	3½″–4½″	22″–24″	12″–14″	Coarse	Large grain, white, good type.

ST. LUCIA FARM TRAINING SCHOOL.

Mr. J. A. Kerr, Supervisor, St. Lucia Farm Training School, reports:—

In the course of the year 76 boys who had completed training went to rural employment, the majority being placed under the St. Lucia scheme while a few went to farms of their own selection. In addition to these, three boys gained scholarships at the Queensland Agricultural College.

No difficulty has been experienced in placing boys, the demand being greater than the supply. Many farmers are showing a preference for St. Lucia trainees, some preferring to wait

several months for trainees from St. Lucia rather than take on untrained youths. During the past six months the average wage offered has increased 50 per cent. Letters received from many of the boys placed show that they are working under happy conditions and are receiving good treatment from their employers.

Three examinations were conducted during the year by officers of the Agricultural Branch to select lads for the scholarship to the Queensland Agricultural College. The examiners on each occasion remarked on the excellent work done by many of the candidates.

The completion of the new dormitory with a capacity for forty beds has enabled the course to be converted into six months' boarding, compared with the original half boarding and half daily attendance. This arrangement has proved more satisfactory. During the past twelve months many improvements have been effected in the farm buildings. For convenience, these are being centralised on a small hill some distance from the dormitories.

New milking bails and yards were built and are now in use. A new cream house will shortly be completed, while stables, feed-room, and implements shed are also under construction. All of this work was done by the trainees under supervision. New piggeries covering an area of three acres and subdivided into six paddocks, allowing the pigs to be rotated from paddock to paddock, were completed last November.

Over forty chains of new fencing have been erected, enclosing new farm land and pasture blocks. To continue to give the necessary training in fencing the subdivision of the grazing area will be carried on during the next year.

Farm.

The area under cultivation comprises 33 acres. Practically all of the more important crops for coastal conditions are grown, including maize, sorghum, lucerne, English and sweet potatoes, pumpkins, cotton, millets, sudan grass, arrowroot, mangels, cow-cane, wheat, oats, barley, rye, field-peas, and vetches. The maize crop produced 220 bushels of grain, 120 of which have been tanked for future use. To illustrate the value of fodder conservation, maize and sorghum were used for the construction of a 30-ton silage stack; and excess grass was cut and stacked, providing bush hay. Varietal trials of sorghums, English and sweet potatoes have increased the educational range. The Pasture Improvement Committee's experimental plots cover an area of over 6 acres, and should be of both instructional and practical value. Winter feed is provided for by growing crops of wheat and field-peas, oats and rye.

Land is being prepared for early planting of potatoes. The first ploughing of the land for the next year's maize crop is almost completed, and other areas are being prepared for early plantings of arrowroot and other summer crops. The garden has been rearranged and abundant supplies of vegetables are produced for domestic use.

Livestock.

The dairy herd of thirty cows provides a fair medium for training. The training in dairy work constitutes one of the most important sections of the livestock management course. The construction of the new milking bails has greatly improved this section. Four breeding sows are used in the piggery.

Poultry.

The poultry flock is now composed of sixty Australorps raised from day-old chicks. These supply the needs of the kitchen, and also allow instruction on poultry raising. An incubator loaned by the Poultry Farmers Co-operative Society is used for practical instruction.

Moggill.

Eight boys are sent for weekly periods to the Moggill timber camp. From this camp all supplies of bush timber, fence posts, &c., are drawn for St. Lucia. The instruction here covers the necessary training in bush work, clearing, falling trees, splitting posts, &c. The cooking at the camp is done in turns by the trainees.

Lectures.

Lectures are given for a period of one hour each Monday, Tuesday, Wednesday, and Friday. Dairying, piggery management, horticulture, and poultry are treated by officers of the Department of Agriculture and Stock, while lectures in agriculture are given by the training farm staff. Each Tuesday a lecturer from the Queensland Ambulance Brigade gives instruction on first aid.

Recreation.

The thanks of the training farm are extended to the proprietors of the following papers, who supply the farm with free copies of their publications:—"The Telegraph," "The Courier-Mail," "The Daily Standard," "Smith's Weekly," "The Sunday Mail," and "The Queenslander." These publications, together with the library wireless set in the reading room, ping-pong set and bobs set in the common room, provide ample occupation for leisure hours. The football ground is being improved and the tennis court top-dressed. The Shell Company of Australia frequently display their educational films, including "Dairying in Australia" and "The Poultry Industry," for the benefit of the trainees.

Staff.

The staff includes the supervisor, the farm foreman, an officer in charge of the dairy, a cook, and two relief workers who assist in instruction in fencing, &c. At Moggill an instructor is permanently camped, who gives instruction in all phases of timber work. Farm blacksmithing, butchering, and other necessary farm work are included in the curriculum.

SUMMARY OF EXPERIMENTAL WORK.

Dr. L. G. Miles, Plant Breeder, reports:—

Maize.

Experimental plots of the four varieties—Improved Yellow Dent, Reid's Yellow Dent, Star Leaming, and Funk's 90 Day—were arranged, and field and barn selections made to supply seed for future plot work and for sale to farmers.

The quality of most lots of seed has been very good.

Wheat.

Close contact with the wheat breeding projects was maintained throughout the 1934 wheat season. Notes were taken on practically all of the plots, and suggestions made in connection with the work.

Tobacco.

Tobacco work in Central Queensland was reported on, and suggestions made concerning the programme and the establishment of a Pure Seed Area. A seeds programme has been inaugurated whereby a number of varieties of likely importance are grown in a seed selection plot near Rockhampton. Heads of good type plants of each variety are bagged to ensure self fertilisation, and small amounts of pure seed of each are thus obtained each year. Seed from these sources is to be used to plant the larger Pure Seed plots where bulk seed is raised under conditions of isolation for sale to farmers. Seed sold to farmers is thus but one generation removed from pure seed produced under bag by Departmental officers.

A standardised lay-out for varietal experiments in the various tobacco districts has been drawn up, using four randomised blocks with ten (or thereabouts) varieties replicated in each block. It is suggested that these plots be run for a series of four or five years in order to determine with as great precision as possible the most suitable varieties for the various districts.

Sorghums.

A number of grain sorghums introduced from the U.S.A., South Africa and Egypt have been available for tests. Individual hooded heads from the Darling Downs and from Imbil were used as the basis of a plant-to-row selection plot, and a number of rows were planted out at the St. Lucia Training Farm School. Owing to the depredations of sparrows, row yields could not be taken. It was observed, however, that in all cases the selections within a variety were fairly uniform. Good heads of grain were produced on practically all varieties, but owing to the attacks of sparrows, only small quantities of pure seed could be obtained.

The descriptions of the varieties follow:—

Blackhull C.I. 71.—Sturdy plants—slender to medium—9 or 10 leaves, drooping, medium width. Medium length neck (about 9 in.). Head long,, medium compact, heavy yielder. Height 6 ft. 1 in.; 88 days to heading.

Western Blackhull Kafir.—Similar type of plants to C.I. 71—no marked differences. Generally more open, but lighter heads, 8 or 9 leaves per stalk. Height 6 ft.; 83 days to heading.

Pietersburg White.—Very late, thick stocky stem, leaves 10 or 11, erect to horizontal. Short neck up to 3 in. Head long, with large number of short, compact branches. Height 5 ft. 5in.; over 90 days to heading.

American Early Red.—Medium height, not early, slender, but strong stems, with 7 to 8 leaves, narrow to medium, stooling well from top leaf sheaths. Heads of good length, of cylindrical type, and moderately open. Height 4ft. 5 in.; 86 days to heading.

Redfort Hayes.—Erect, slender type, with thin stem and leaf, about 8 leaves per stalk, moderate stooling. Open type of head when mature, panicle with few branches. Long neck, 12 in. or more. Attractive type, but apparently not very prolific. Height 5 ft. 6 in.; 75 days to heading.

Sharon.—Fairly thick, stocky type, 9 or 10 broad leaves, fairly horizontal. Heavy head with many branches, thickly cylindrical, medium compact; short neck about 4 in. to 6 in. Height, 5 ft. 10 in.; 88 days to heading.

Giza 4.—Tall, weak stems, lodged; clubbed heads, fairly compact. Height, 6 ft. 9 in.; 83 days to heading.

Reed.—Medium stocky, with heavy, open head, stools freely from base, 8 to 9 leaves per stalk. Height, 5 ft. 6 in.; 85 days to heading.

Dwarf Pink.—Semi-dwarf, with medium size cylindrical to open head, about 8 leaves per stalk, moderate stooling. Height, 4 ft. 9 in.; 80 days to heading.

Birdproof.—Tall variety, with slender but wiry stems and rather sparse, narrow leaf, 7 to 9 leaves per stalk, good, open type of panicle, large but very open. Gave promise of resisting sparrow attack, but finally succumbed. Height 7 ft.; 87 days to maturity.

Kalo.—Dwarf type, slender with fairly long neck, 9 to 15 in. and rather small, open head. About 6 narrow leaves per stalk. Stools abundantly. Not as prolific as some dwarf varieties, but very uniform. Height 4 ft. 3 in.; 70 days to heading.

Klerksdorp 3.—Medium type, 7-8 slender leaves. Stem slender to medium. Heads long and slender, though some open nicely. Short neck and moderate branching from near top. Height, 5 ft. 3 in.; 82 days to heading.

Klerksdorp 4.—An attractive dwarf type, strong and stocky, with a good size, very open head. Neck short to medium, about 7 short, narrow leaves. Height, 3 ft. 7in.; 73 days to heading.

Bergville 3.—A slender type, not too strong, leaf sparse, 6-7 fairly narrow leaves. Head fairly open, but nó larger than that of the dwarf variety Klerksdorp 4, medium neck. Height, 5 ft. 10 in.; 82 days to heading.

Bergville Selection.—Tall growing, fairly stocky variety, 8-9 leaves, medium wide, a few very large heads, long cylindrical, up to 15 in. Height, 6 ft.; 89 days to heading.

Natal 4.—Semi-dwarf, short to medium neck, fairly strong and stocky, 7 to 8 medium-wide leaves, moderate stooling, head of good length, medium open. Height, 4 ft. 9 in.; 83 days to heading.

Natal 6.—Slightly taller, later, and less uniform than Natal 4. Rather good type of open head when grain is filled out. Neck short to medium, sparse stooling. Height 5 ft. 1 in.; 88 days to heading.

Old White.—Tall, thick plants, tendency to lodging and recurved necks, branches from topmost leaf sheath, leaves 9-11, fairly wide. Head unattractive, compact, clubby, but grain very large. Height 7 in.; 88 days to heading.

Atlas.—Tall and thin, but fairly wiry. Yellowy green midrib, indicating juiciness, 8-10 leaves, medium wide. A few small shoots from

near the top. Heads rather short and clubby, grain small. Height, 7 ft. 2 in.; 88 days to heading.

Giza 16.—Late, uneven, compact head with large grain. Height 6 ft. 9 in.; 90 days to heading.

Dawn.—Medium tall, thin, but wiry. Heads open but of only medium size and productivity. Height, 6 ft.; 87 days to heading.

Hayes Dawn.—Medium height, much stooled variety, heads of good size but variable, open out well when mature, tendency to curved necks. Height, 5 ft. 4 in.; 81 days to heading.

Potchefstrom Dawn.—Thin plants mostly with single branch shoots. A few fairly good heads similar to those of Hayes Dawn. Height, 5 ft. 8 in.; 86 days to heading.

American Red.—Uniform row, slender plants, moderately good stooling, sparse leaf and light head, not prolific. Height, 4 ft. 9 in.; 82 days to heading.

Brown Yolo.—Dwarf variety with short stiff stalk, early, with good head for size of plant, large brown grain. Height, 3 ft. 6 in.; 72 days to heading.

Wheatland Milo.—Good dwarf type, uniform, stocky, with erect heads of good size, stools very well. Height, 3 ft. 8 in.; 70 days to heading.

Hegari.—Stems slender and weak (though they have been given good reports elsewhere), little leaf. Heads small but good, with good white grain. The earliest of all to mature grain, which develops surprisingly quickly after heading. Height, 3 ft. 9 in.; 70 days to heading.

Club Kafir.—Not a very promising type, head compact and clubbed. Height, 5 ft.; 82 days to heading.

Day Milo.—Very good dwarf type, with good stooling. Good type of open head, but tendency to recurved neck. Height, 3 ft. 3 in.; 72 days to heading.

Potatoes.

The potato varieties introduced from Victoria and Tasmania were tried out during the spring at the farms of Mr. L. Oxenford, Oxenford, and Mr. M. Reeves, Imbil. Planting was carried out in chain rows by Mr. A. F. Skinner at both these locations in August. The potatoes were dug in December, weights being taken and brief descriptions made.

The plot at Oxenford had received three sprayings against late blight, with the result that the tubers harvested were quite healthy and very little loss was suffered from rotting. The Imbil plot was unsprayed, and the incidence of blight late in the season had a considerable effect on the yields. Of the various types, the white varieties were far more badly attacked than the coloured, with the result that in the former a high percentage of the largest tubers were rotted. The blue varieties were least attacked, and were found to possess by far the greater percentage of sound tubers.

Weights of tubers in lb. per chain row for both plots are given below. Following this table are brief descriptions of the varieties tested.

Variety.	Yields in lbs. per Chain Row.	
	Oxenford.	Imbil.
Coronation	104·5	78
White Rose	71	32†
Carmen, No. 3	102	47*
Carmen, No. 1	73·7	29†
Earliest of All	113	73*
Late Manistee	92	48*
Ruby Red	109·5	65
Plunkett	99	53
Up-to-date (Vic.)	114	44†
Bismarck	93	47†
Scottish Triumph	103·5	66†
White Monarch	125	72
Medium Brownell	111	59*
Late Brownell	107	58
Up-to-date (Tas.)	113	34†
Arran Banner	98·3	57
Bismarck Original (Tas.) ..	97	15‡

* Fair number of tubers rotted.
† Badly rotted.
‡ Very badly rotted.

White Monarch (Tasmania).—White; outyielded all other varieties at Oxenford, but proved very late at Imbil, and produced large numbers of small unmarketable tubers packed close to the base of each plant. Produced potatoes of marketable size at Oxenford.

Arran Banner (Tasmania).—White; at Imbil a very uniform lot; medium size, attractive, free from disease. At Oxenford tubers inclined to be small.

Plunkett (Victoria).—A blue variety of medium period of maturity; free from blight; prolific and fairly uniform, but with rather deep eyes.

Up-to-date (Tasmania).—White; medium early; yielded well at Oxenford but badly rotted at Imbil. Lacks uniformity in size.

Up-to-date (Victoria).—White; fairly early; more uniform than the previous strain and of good size and shape. Badly blighted at Imbil.

Medium Brownell (Tasmania).—Pink; Satisfaction type; a good percentage of large, well-shaped, rounded tubers; uniform in shape and size, and a good cropper. At Imbil much freer from blight than the white varieties.

Late Brownell (Tasmania).—Similar to previous variety but somewhat later, with a larger percentage of small tubers.

Bismarck (Victoria).—A white tuber with pronounced blue coloration in the eyes; early; a fairly heavy yielder of large, uniform tubers. At Imbil tubers were badly rotted and a large number showed second growth.

Bismarck Original (Tasmania).—Very similar to previous variety; probably earlier. This variety was blighted worse than any other at Imbil; otherwise would have yielded well.

Carmen No. 1 and No. 3 (Victoria).—These varieties yielded fairly well at Oxenford, but were poor at Imbil owing to the fact that most of the largest tubers were rotted. A fairly large percentage in both cases were unmarketable.

White Rose (Victoria).—A round, white potato; very early; fairly uniform at Imbil, but large percentage small and a considerable number blighted. Showed second growth and lack of uniformity at Oxenford.

Ruby Red (Victoria).—Deep red, fairly late. Tubers of good size and uniform shape, but eyes are too deep for a good table variety. Prolific and free from blight.

Earliest-of-all (Victoria).—A promising early white variety, which produces a good percentage of large tubers of long shape. Suffered to some extent from blight at Imbil but still yielded well. One of the best white varieties in these tests.

Coronation (Victoria).—A blue variety possessing oval tubers of good shape and marketable size; a uniform lot with very small percentage unmarketable. Very little blight; prolific.

Late Manistee (Victoria).—This variety is early rather than late, with pink tubers of fair size and shape. Medium blight, fair percentage small.

Scottish Triumph (Victoria).—A medium early variety with fairly large, oblong, white tubers. Yielded well at Oxenford, and would have been very good at Imbil but for the fact that many of the largest tubers were rotted.

Of the new varieties recently introduced from the United States and tried out in the autumn at Oxenford, Katahdin showed the greatest promise on this, its first appearance, with Chippewa probably next. Of the South American varieties in this lot a few were quite prolific, but probably none in their present state would be acceptable table varieties. Some tubers of very good type were present, however, as in Frutilla. It may be possible to isolate these desirable types by hill selection.

Peanuts.

By arrangement with the Peanut Board at Kingaroy a programme of pedigree selection has been commenced with the variety Virginia Bunch. A common complaint with this variety recently has been that germination has been poor, resulting in irregular stands. Discoloration of the kernels and the interior lining of the hulls had been noticed, and it was thought that possibly some fungus trouble was responsible for the poor germination experienced.

The object of the selection programme was to select for freedom from discoloration and for high germination percentage as well as for higher yield and greater uniformity of nuts.

In October, 1934, a visit was made to Kingaroy, where a large number of nuts were picked over to provide 15 lb. of sound, healthy kernels of good size. These were planted in a seed plot on the farm of Mr. L. V. Young, Wooroolin.

At harvest time these plants were examined, and more than 200 single plant selections were made. The seed from these plants will be planted in individual progeny rows this season, and the progenies will be compared for uniformity, type, and yield. The programme will be continued until more uniform and higher yielding strains are obtained for testing against the bulk seed of the variety. It is hoped to carry out similar work on the Red Spanish variety, as very little work has previously been done on any peanut variety, and there is obvious need for improvement.

In addition, a number of introduced varieties have recently been obtained from Grafton Experimental Farm. These will be given a trial against the existing varieties, in the hope of possibly finding some still better type for the South Burnett district.

Beans.

A small programme has been commenced with beans, resulting upon the discovery of an off-type in the variety Africanda by Mr. D. G. Badcock, of Amamoor.

This plant, apparently the result of an accidental cross, showed among its progeny an endless variety of types, from the extreme runner type with abundant foliage to the dwarf bush with a heavy yield of pods in relation to plant size.

A number of these segregates were apparently more resistant to bacterial blights than the adjoining crop.

It was therefore considered advisable to carry on a pedigree selection programme with this material in the hope of isolating any desirable types that may be present. Seed from individual plants has been harvested and shelled separately for a plant-to-row plot this year.

REPORT OF SENIOR INSTRUCTOR IN PIG RAISING.

Mr. E. J. Shelton, Senior Instructor in Pig Raising, reports:—

Statistically, the industry is making steady progress, there are not the violent fluctuations now that characterised the early years of development; the reason for this being that the breeding of pigs has become a well recognised industry, a natural adjunct to dairying and mixed farming—a specialised industry, and a commercial venture to which farmers have contributed considerable capital over widespread areas of the State.

Subjoined tables give a view of the position and indicate that in Queensland especially, for several consecutive years, our pig production has exceeded that of former years by several thousand head.

Table 1.

Australian Pig Industry Statistics showing Distribution by States with Totals for Each and for the Commonwealth as a Whole.

State.	1928.	1929.	1930.	1931.	1932.	1933.
New South Wales	311,605	323,499	334,331	385,846	388,273	367,166
Victoria	222,084	265,978	281,245	286,780	278,627	240,530
Queensland	215,764	236,037	217,528	222,686	213,249	217,448
South Australia	62,723	74,906	82,991	109,780	113,831	91,573
West Australia	49,243	64,522	100,664	120,521	117,529	91,213
Tasmania	48,304	52,899	52,899	41,459	41,391	38,126
Northern Territory	407	359	327	665	449	397
Federal Capital Territory ..	51	124	37	108	58	464
Commonwealth	910,181	1,018,324	1,070,022	1,167,845	1,162,407	1,046,867

Table 2.

Bacon Factories, Staff, Capital Invested, and Production throughout Australia.

Items.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
Number of factories	22	20	8	9	7	7	73
Number of employees	286	501	526	204	62	41	1,620
Approximate value of land and buildings	£ 124,681	£ 235,050	£ 177,655	£ 65,206	£ 25,887	£ 12,554	£ 641,033
Approximate value of plant and machinery	44,360	119,190	97,924	28,674	10,198	7,185	307,531
Wages paid	83,666	107,643	115,516	39,520	13,575	6 329	366 249
Total value of output	748,059	848,367	947,895	328,416	136,579	53,589	3,062,905

Table 3.

Australia's Annual Production of Bacon and Ham.

	Bacon and Hams.
	Lb.
New South Wales	19,442,931
Victoria	16,833,907
Queensland	19,639,692
South Australia	6,408,730
West Australia	3,240,306
Tasmania	1,160,630
Total for Australia ..	66,726,196

Table 4.

Development of the Export Trade in Pork Products from Australia to the United Kingdom for Period 1929 to 1933, Inclusive,.

Year.	Quantity.	Value.
	Lb.	£
1929–30	694,003	23,104
1930–31	8,359,206	227,412
1931–32	7,038,210	164,282
1932–33	6,250,047	143,022

Pig Feeding Tests.

Tests to determine whether meat meal can be utilised profitably (*a*) as a substitute for skimmed milk in the rations fed to pigs; (*b*) whether it can be used to entirely replace dairy by-products (buttermilk and whey included, also full cream milk if that is used) in such ration; (*c*) to ascertain the most economical method of using meat meal, and the correct quantity to add to rations in which cereals are used; (*d*) to ascertain the effect on carcass quality of pigs so fed; (*e*) to so compound the rations that an economical roughage (in these tests lucerne chaff) can be added to advantage without unduly increasing the cost of the rations; (*f*) to ascertain the possibility of developing a profitable additional local market outlet for meat by-products (in these tests from the Brisbane Abattoir) through an industry expanding rapidly, but which suffers serious fluctuations in supply of live pigs during periods of dry weather and during winter when milk products are avail-

able in much reduced quantity on farms; and where, without the use of some additional economical foodstuffs, the supply of pigs must be reduced irrespective of results. A further objective was to investigate the possibility of increasing local demand for meat and bone meals.

Composition of Food Mixture Used.

The following is typical of the food mixture as compounded on the recommendation of the Nutritional Committee of the Department of Agriculture and Stock, and used in these tests:—

	Per cent.
Maize meal	45
Wheaten pollard	40
Meat meal	8
Prime lucerne chaff	7

plus a mineral supplement comprised of—

	Per cent.
Calphos (a bone product)	75
Dairy salt	25

Sulphate of iron added at rate of 2 oz. per 100 lb. of mineral supplement. The mineral supplement (complete) is added to the meal and chaff at the rate of 2 lb. per 100 lb. Ample clean drinking water is provided; also a small quantity of greenstuff daily, consisting of paspalum grass (*Paspalum dilatatum*) or green lucerne.

For analysis of this food mixture and for full report of the tests, see the report of the Director of the Animal Health Station, Yeerongpilly.

Identification of Consignments.

Experiments have been initiated this year (some of them in conjunction wtih the aforementioned feeding tests) in the use of various methods of identification of live pigs and of the use of the more recently introduced method of identification by means of ear and body tattooing.

For purposes of these experiments a large number of live pigs have been made available through the courtesy of the Director of the Animal Health Station, and in the tests in which carcasses were required advantage was taken of the offer to co-operate by the several bacon curing concerns and meatworks, especially the Murarrie and Doboy bacon factories and the Brisbane Abattoir.

The experiments had not advanced sufficiently at the close of the year to warrant publication of results, but they are being continued, and it is hoped in due course to have available data of special value to pig raisers, pork exporters, bacon curers, and others on these several methods of identification and on the most economical and dependable tattoo ink or paste.

Stud Pig Registrations for Queensland in the Herd Books of the Australian Stud Pig Breeders' Society, Years 1911 to 1935.

Date.	Berkshires.	Middle Whites.	Large Whites.	Large Blacks.	Tamworths.	Poland Chinas.	Duroc Jerseys.	G.O.S.	Chester Whites.	Wessex Saddlebacks.
1911	217	192	..	..	..	..	..	..	..	..
1912	73	61	..	5	..	..	..	..	..	..
1913	103	22	4	..	..	..	..	..	..	..
1914	286	125	22	..	14	..	..	..	..	..
1915	229	166	4	13	21	..	..	..	..	..
1916	254	69	53	1	4	14	..	..	..	..
1917	269	249	15	..	17	17	..	..	..	..
1918	684	316	11	..	13	14	..	..	..	..
1919	828	292	10	..	22	4	..	..	..	..
1920	365	140	8	..	22	3	..	..	..	..
1921	414	155	12	..	36	11	..	..	..	..
1922	613	220	5	..	51	10	..	..	..	..
1923	666	246	12	..	47	22	..	..	..	..
1924	585	263	9	..	61	28	..	..	..	..
1925	594	282	18	17	95	33	7	4	..	..
1026	998	352	60	22	145	82	29	61	..	..
1927	959	307	96	33	180	94	44	59	..	..
1928	515	135	113	13	160	75	53	55	..	..
1929	487	181	168	24	136	66	84	62	..	..
1930	690	142	309	34	198	52	133	119	4	..
1931	663	209	347	41	292	68	136	99	12	..
1932	563	136	226	28	237	14	44	45	8	..
1933	507	198	449	31	286	25	19	16	..	5
1934	456	187	540	29	221	15	8	11	..	6
1935	523	312	824	19	242	8	5	7	1	9
	12,541	4,957	3,315	310	2,500	655	562	538	25	22

Total 25,425

The increased attention given in recent years to investigation of the incidence of disease in pigs has resulted in a noticeable reduction in the number of animals condemned (in part or whole) on slaughter and in the number affected with serious diseases.

Inspection of Piggeries.

The co-operation of dairy inspectors and stock and slaughtering inspectors in regular inspection of pigs and piggeries has been very satisfactory, especially where the paddock system of pig raising supersedes the sty and small yard system.

There has been some improvement in the conditions under which pigs are kept at suburban and at butter-milk piggeries and also at slaughter-yard piggeries. Fortunately, there have been no serious epidemic diseases among the pigs so housed and controlled.

Staff Report.

Mr. L. A. Downey, Instructor in Pig Raising, reports as follows:—

During the year under review the peak price paid for pigs, during the month of November, was the highest since the year 1930; this naturally led to a greater interest in the pig industry and was, no doubt, responsible for the increased demand from the farming community for instruction in pig raising.

To cope with this demand publications on various phases of pig raising have been revised and reprinted; the correspondence course of instruction has been revised and brought up to date. These methods of conveying information to farmers have been used extensively, for they provide a means of communication with a larger number of people than would be possible if personal instruction and demonstrations alone were given.

Extensive field work, in the form of farm visits and practical demonstrations to individuals and parties of farmers, was carried out.

Co-operation with stud pig breeders and frequent visits to their studs have led to a better understanding regarding the class of pigs required by the industry and a standarisation of breed types. Assistance in culling and selection of breeding stock has been sought by a large number of stud breeders and others.

In order to focus attention of pig breeders on utility factors in pig production a number of breeders have been induced, during recent months, to record litters of pigs under our supervision. The following summary of litters recorded provides a standard for future work and illustrates the variation which occurs even between a number of good litters, for these litters recorded are all considered good, and probably above the average:—

Table 7.

Owner.	Breed.	Date of Birth.	No. Reared.	Weight at Eight Weeks.	
				Total.	Average
				Lb.	Lb.
Hibberd Bros., Indooroopilly ..	Large White	21 Feb., 1935	12	473	39·4
Hibberd Bros., Indooroopilly ..	Large White	19 Jan., 1935	8	384	48·0
H. O. Rees, Maleny	Middle White	21 Feb., 1935	10	386	38·6
A. G. Stewart, Gympie	Large White	9 Nov., 1934	11	453	41·1
A. G. Stewart, Gympie	Large White	9 Feb., 1935	8	284	35·5
R. Turpin, Lowood	Wessex Saddleback (Grade)	20 Mar., 1935	10	422	42·2
R. Turpin, Lowood	Wessex Saddleback ..	8 Apr., 1935	10	447	44·7

A considerable amount of work was done in disseminating information regarding the planning of new piggeries and reconstruction of old ones; this indicates the desire of pig raisers to increase production and prevent disease in their stock. As a result of the Department's advocacy of pasturing pigs, there are now a number of very well conducted piggeries where the stock are kept entirely in paddocks with excellent results, and this system is becoming more general.

Close co-operation with the Animal Health Station, the bacon factories, and the Brisbane Abattoir provided opportunity of studying all aspects of the industry.

Co-operation of Agricultural Societies.

Excellent work has been done in co-operation with the Royal National Agricultural Association of Queensland and with other agricultural societies throughout the State in encouraging the exhibition of a better class of stud and commercial pig, and much interest has been aroused.

REPORT OF THE POULTRY EXPERT.

Mr. P. Rumball, Poultry Expert, reports:—

In the period under review the interest displayed by producers in this industry during the past few years has been maintained, with the result that the overseas export of eggs in shell reached the record total of 1,944,810 dozen, as compared with the previous year of 1,458,480 dozen. The Egg Board receivals for the year 1934 totalled 4,718,907 dozen as compared with the previous year of 3,985,000 dozen—an increase of 733,907 dozen. Of this increase, 486,330 dozen were exported overseas, 128,194 went into local consumption, leaving a balance of 129,383 to be disposed of otherwise.

During the major portion of the export season, the exportation of eggs was financially sound. Local sales can be looked upon in a similar light, but any other market that the Board has to utilise for production in excess of what can be consumed locally, or what can be exported overseas as eggs in shell, is definitely unprofitable to the producer. There appears to be only one alternative, and that is to increase local consumption. Failing that, further expansion will bring hardship to those already engaged in the industry.

The Egg Board has, by price and quality, made some impression upon surplus in inducing greater local consumption, but still further demand is essential.

The manufacture of egg pulp for local requirements has also been more extensively engaged in by the Board during the past year than formerly, and, from reports, the pulp is of a uniformly high quality. A small quantity was exported, but as yet no advice as to realisations has been received.

The possibility of the export of table poultry is being investigated. It is not contended that a flourishing trade can be built up immediately, but there are periods in the year when the supply is greatly in excess of local requirements, with the consequent fall in values. This fact well justifies a consideration of the possibility of establishing an export trade in dressed poultry.

Close co-operation exists between the Branch and the Animal Health Station, both in reference to the subject of disease in poultry and nutritional work. The results of nutritional experiments at the Animal Health Station have been circulated widely, and where they have indicated any definite advantage to breeders, poultry raisers have not been slow in adopting improved practices of feeding.

Many poultry raisers who do not mix the rations used in the feeding of their own flocks have, by demand, caused at least two firms catering extensively for the poultryman's requirements, to prepare rations on a similar basis to that used in nutritional experiments in the raising of chickens. The advantage of these rations is in evidence on many farms, in the better development of young stock.

Centres from Stanthorpe to Cairns and including inland districts, where poultry raising is engaged in, have been visited at intervals in the course of the year. In the course of these visits, instruction has been given to individual farmers on the principles of poultry breeding and production. Wherever possible, lectures are given and field days held. Lectures and field days we feel are among the best means of conveying information and inducing farmers to adopt better practices.

It is gratifying to be able to report that the general poultry raiser is becoming more alive to the necessity of maintaining a healthy and vigorous flock. In view of the density of the poultry population in the Greater Brisbane area, that fact is very pleasing, for it will assist materially in the maintenance of the health of our flocks.

Fowl Pox.—This was at one time one of the most prevalent disorders of the poultry world, and a trouble that almost every farmer expected yearly is now being controlled by inoculation, vaccines for inoculation being readily obtainable.

REPORT OF THE DIRECTOR OF COTTON CULTURE.

The season under review has furnished another excellent illustration of the value of including cotton in the cropping system of most of the districts of the south-eastern section of the State. Although the average yield per acre for many growers will not be as high as was obtained under the favourable conditions of last season, the returns realised where the best methods have been used have amply demonstrated that cotton is well suited for the variable climate of this section.

The outstanding feature of the seasonal activities has been the expansion of the Australian market, brought about by the Commonwealth Government implementing the recommendations of the Tariff Board arising out of the careful investigation by the latter body into all phases of the cotton growing and spinning industries in this country. The main points of the new legislation include protective tariffs for the first time on condenser yarns for the manufacture of blankets; yarns for the manufacture of cotton tweeds, drills, denims, dungarees, gabardines, jeans, and similar fabrics of not less than 6 oz. or more than 18 oz. in weight; cordage; bleached, dyed, and random dyed yarns; a reduction of duties on yarns previously spun in Australia; a reduction of duties on edible vegetable oils; and the selling of Australian-grown cotton to the spinners at import parity. A new Bounty Act was also put in force whereby bounty will be paid to the cotton-growers on lint cotton instead of seed cotton, which has been the custom in the past. The new bounties extend over a period of five years, and operate each season in such a way as to compensate for falls in Liverpool prices to a certain point, but are reduced as prices rise, until eventually no bounty is paid. The basic bounty rate is reduced the second year, and again in the third year, at which level it continues for the rest of the period.

The requirements of the spinners under the first year of operation of the new scheme have been mostly met out of the crop of this season, and only a few styles of cotton not needed by the spinners will be exported. It is anticipated, however, that the expansion in manufacture of certain of the newly protected yarns and goods that will take place in the following season will enable a larger crop to be sold in this country. Given reasonably favourable climatic conditions, no difficulty should be experienced in supplying such a demand.

The Commonwealth Bank has again financed the industry, advancing 80 per cent. of the value of the crop. Owing to the bounty being paid on lint rather than seed cotton, it has been necessary to formulate a most comprehensive schedule of advances based not only on grade and staple, but the lint percentage of each variety as well. The usual table of advances is not included, therefore; but, generally speaking, the average price that the growers will receive this season will be somewhat better than the prices of the last two seasons.

Although good yields generally were obtained last season, the disastrous results of the two previous crops, which had seriously affected the economic position of a large number of growers, prevented many of them from liquidating their various debts, or, where such was accomplished, it was necessary to obtain additional assistance to finance the 1934-35 crop. Accordingly, the State Government again assisted necessitous farmers and share-farmers out of the Cotton Production Relief Fund. Some 154 farmers and 218 share-farmers were granted loans totalling £11,397, as compared with £16,326 in 1933-34 and £28,885 in 1932-33. By the 30th June 80 per cent. of the total, including interest, had been repaid, with an estimate of an additional 8 to 10 per cent. when the final payments for the 1934-35 crop have been received. The repayments speak well for the soundness of the industry as a risk to assist in disastrous seasons, particularly when it is considered that in only one of the three seasons in which advances have been made have reasonably fair yields been obtained by most of the growers who were assisted. The relief loan will be continued during the 1935-36 season to help liquidate any outstanding advances, and to assist other growers in re-establishing their financial position.

Divisional Results.

With the exception of portions of the Upper Burnett, South Burnett, and in all other districts where growers were late with their cultivations, the crop got away to a good start in October, with the bulk of the plantings in the latter half of the month. During the second half of November exceptionally good rainfall was experienced in all districts, which not only thoroughly established the plantings made, but enabled the sowing of the crop to be completed. Somewhat snappy growth developed on the richer soils, but a favourable dry spell in the first half of December checked the plants sufficiently to put them in nice condition for rains at the end of the month. Good falls then carried the crop over into the new year in a very satisfactory condition, all districts reporting very promising prospects for the bulk of the acreage. Unfortunately, only mostly hard-beating storms occurred during January. These did little more than revive the crops, as the run-off was excessive except on newly broken-up cultivations. All areas required steady soaking rain at the end of the month not only to save the bolls set, but to start the development of squares to make a top crop. Hot, trying conditions, broken only by a few light storms, continued, however, until the 20th of the month, when a general storm relieved the situation suf-

ficiently to stop shedding of the upper bolls. Dry conditions ruled mostly from thence onwards. with the result that, except in a few favoured small areas, no further crop of any consequence developed. It was unfortunate that such a severe drying-off of the season occurred, for undoubtedly at mid-January the prospects for a record crop were most promising in nearly all districts.

The following table of rainfall recordings for representative centres in various sections of the main cotton belt is included to give a general indication of the nature of the season. Much of the mid-seasonal rainfall was in the form of severe thunderstorms, so that some of the recordings are misleading, being apparently ample, but actually having been of only slight assistance to the crops.

MONTHLY RAINFALL.

1st July, 1934, to 30th June, 1935.

(In 100ths of an Inch).

Station.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	June.	Total.
Boonah	3·63	1·56	1·01	3·70	3·51	4·54	3·08	5·87	1·03	2·18	1·64	0·02	31·77
Kalbar	3·71	1·95	1·12	2·62	3·29	7·42	2·32	6·39	1·05	2·02	1·15	0·05	33·09
Laidley	2·96	0·91	1·41	2·01	3·79	4·89	4·70	2·67	0·78	1·32	1·04	0·07	26·55
Gatton	3·39	0·87	0·65	1·44	3·24	5·27	4·07	5·34	0·83	1·72	2·94	..	29·76
Lowood	3·65	1·04	0·64	2·03	2·99	4·71	6·85	7·01	1·33	1·30	1·61	..	33·16
Murgon	3·08	0·46	1·01	2·25	8·24	7·27	2·93	5·43	0·35	1·69	1·50	..	34·21
Gayndah	2·03	1·80	2·06	3·26	7·32	6·84	2·24	5·15	1·41	0·74	1·65	..	34·50
Eidsvold	1·49	2·30	1·43	1·80	6·45	6·73	3·80	2·26	0·33	1·74	1·16	0·18	29·67
Camboon	1·79	0·55	1·35	1·20	6·74	5·17	5·69	1·75	1·00	0·33	1·72	0·24	27·53
Many Peaks	1·15	1·05	0·89	3·43	4·93	4·74	8·09	4·03	1·39	1·57	1·82	0·09	33·18
Mount Larcom ..	0·56	0·38	0·98	3·11	6·22	6·57	5·23	6·12	1·09	1·12	1·99	0·45	33·82
Rockhampton	0·42	0·46	0·30	3·21	7·02	3·55	4·11	3·79	1·49	0·75	1·09	0·40	26·59
Westwood	0·69	0·11	0·92	1·97	7·38	5·03	6·03	1·86	0·51	0·61	1·12	0·51	26·74
Wowan	0·72	0·54	1·01	3·11	5·35	5·80	4·37	3·14	1·49	0·63	0·95	0·69	27·80
Biloela	0·74	0·38	1·16	3·16	6·15	5·57	3·77	2·62	1·41	1·29	1·28	0·26	27·79

Standard of Cultivation.

The standard of cultivation maintained has, generally speaking, been satisfactory. The results obtained last season amply demonstrated the value of keeping the crop well cultivated, especially early in the season. Most growers who followed this practice were able to cope with the unusually heavy weed growth that developed under the exceptionally wet conditions. Accordingly, when showery weather developed in November of this season, every advantage was taken by most of the growers to get their crops cultivated and cleaned, and undoubtedly this had a decided effect on the final yield obtained. Where early cultivation was neglected, the resultant weed growth seriously checked the development of the cotton plants, and greatly reduced yields and the quality thereof.

Crop Yields.

A yield of 18,700,850 lb. of seed cotton was produced to the 20th June, as compared with a total for the last crop of 26,861,635 lb., which is the record for any one season. By the end of June 3,139 growers had reported crop possibilities on 56,682 acres, as compared with a total of 3,202 growers and 49,283 acres last season. A certain amount of crop abandonment through inability to cope with weeds, destruction of crops by severe hailstorms, and failure to obtain burns in newly fallen scrub accounts for the lesser number of growers. The average yield of the better growers was not as high as that of the previous season, but clear-cut evidence was obtained in all districts of the advisability of growing cotton on cultivations not over three or four years out of the grassland state, and also in rotation with Rhodes grass and other fodder crops. Undoubtedly a greater factor of safety for producing satisfactory yields under a wide range of climatic conditions can be obtained by following these practices.

Quality of the Crop.

The quality of the crop has again been adversely affected by seasonal conditions. Fortunately, ample seed of the harder-bodied cottons was available to plant a good proportion of the soils of low moisture-holding capacity, so that the situation was not as bad as might have been under such extreme stress conditions. The dry harvesting period allowed of the preparation of the cotton in a satisfactory manner, however, and the spinners have found the deliveries made so far to be suitable for their operations. Difficulty has again been experienced with a certain amount of "light spot" in a considerable percentage of the lint of the higher grades. Studies carried out have tended to indicate that infection of the bolls by angular leaf spot may be the cause of this aggravating trouble that has kept a lot of good cotton out of the mature straight grades, which do not allow of spotted or discoloured lint.

Cotton Research Station.

Although the average yield of 868 lb. seed cotton for the total acreage of the Cotton Research Station will not reach the record one of 1,105 lb. produced under the favourable conditions of the previous crop, it must be considered very satisfactory for such an adverse season. The results obtained from the various experiments will be reliable, however, and thoroughly indicative for the season of such variable conditions. With a little more soaking rainfall in January, a very heavy crop would undoubtedly have been produced over a greater portion of the Station.

Confirmation of previous findings was obtained in the crop rotation studies, indicating that some gain in yield results in dry seasons when cotton follows panicum, Sudan grass, saccaline, maize, and similar fodder crops. Better gains were realised, however, when

cotton was planted on land that was in cotton last year following two years of Rhodes grass. A gain of 124 lb. of seed cotton per acre was obtained in this experiment on fertile alluvial soil, and 80 lb. on a slight slope of soil of low moisture-holding capacity. In a comparison of land continuously in cultivation for respectively ten and three years out of the original grassland state, cotton being the only crop grown, three out of five varieties yielded heavier on the newer cultivation. The two exceptions were a big boll type suitable for wet districts, and a slow-flowering variety which requires favourable conditions for developing a late middle and top crop. The stimulation of the higher nitrate content of the older cultivation would thus be of assistance to both of them.

Soil-moisture studies carried out in cultivations ten, five, and three years out of the original grassland state showed conclusively that the continuous growing of cotton for ten years undoubtedly tends to make the soil less permeable, especially to hard-beating storms. Apparently the continuous cultivation of row crops stimulates the development of the bacteria which hasten the decomposition of organic matter —such as the roots and refuse of the cotton plants, and the small amount of grass and weeds ploughed under each season. The reduction of organic matter allows the soil particles to run together and set in a hard state, which requires a very soft, steady, soaking rain to bring about any appreciable penetration to the lower depths. The studies showed also the effect of late spring ploughing, the moisture content of the first 12 inches being appreciably lowered in all three cultivations, and outstandingly so in the oldest one, due to the more cloddy nature of the breaking-up, which was to a depth of 6 inches, allowing of a greater drying out of the subsoil.

Nitrate studies were continued in old cultivations of rich alluvial clay loams, and an excellent illustration was obtained of how rapidly the nitrate content of such soils increases under favourable conditions during the spring months. A correlated rank growth of cotton plant accompanied the increase of nitrates, and had a regular wet early mid-season been experienced, serious loss of crop would have resulted. A slower rate of nitrate manufacture was obtained following an early winter ploughing of a panicum stubble.

The soil-moisture and nitrate studies thus tend to explain the results obtained in the various experiments comparing the value of different rotations, following Rhodes grass and planting on the newer cultivations. Each season yields additional evidence of the necessity for growing cotton in rotation with fodder crops or grasses, and undoubtedly a decided increase in the total yield for the State will be obtained when more growers follow this practice.

Pure Seed Operations.

The increasing of the stocks of seed of the varieties producing the classes of lint now required by the Australian spinners has continued satisfactorily this season. There will be sufficient seed in the coming season to supply all growers on soil types where it has been demonstrated that such cottons can be grown profitably. Definite progress has also been made in the development of purified strains of the different varieties that have possibilities. Considerable acreages of pedigreed seed of recent origin from the breeding plots will be available of the older varieties, with several most promising newer strains of the same varieties still undergoing tests to decide their merits. Work has also been started in the more promising of the recently introduced cottons.

The tests of last season having shown that the Half-and-Half variety of American Upland cotton may be very suitable to produce the spinner's requirements of short staple, a further consignment of 500 lb. was obtained for this season. The yields of the various quarantine plots, while variable, have been fairly satisfactory, and with the high lint percentage of the variety, it appears that the growers in some districts will be able to obtain profitable returns. The position in regard to supplying the demands for short cotton has thus been improved.

Varietal tests and general results obtained by the growers have again shown that some of the newer varieties are superior to the old Acala and Lightning Express cottons, so these two have therefore been discarded. The distribution of the Mis. Del. 1 and 2 and D. and P. L. 4-8 varieties will also be discontinued, as they are suitable for only very limited areas. The reduction in the number of varieties for general distribution has thus progressed, and it is believed that eventually only a few of wide adaptability will be needed to meet the various climatic and soil conditions and to supply the requirements of the spinners.

Advisory Work.

The activities of the field staff have been continued along the lines of the previous season with satisfactory progress. The results obtained from the varietal tests conducted by the instructors have given very clear leads as to the most suitable varieties in some of the districts, and the distribution of seed there can be made with confidence that the growers are obtaining suitable cottons. In other districts the data obtained from the tests indicate the necessity and value of carrying out such work over a long period of years. A considerable part of the activities of the staff has been devoted to extensional and educational work in connection with the value of growing cotton in rotations. Personal interviews, general meetings, and exhibits at district shows all featured this aspect of cotton-growing, and it is apparent that a greater number of growers realise the necessity of following such a practice. Three members of the staff again assisted the Department of Labour and Industry in making loans to necessitous cotton growers to enable them to produce a crop.

Grading.

The Government graders have again graded the seed cotton and resultant lint. With the advent of the new system of payment of bounty on lint instead of seed cotton, as was previously the case, it has been necessary to change the grading of the seed cotton. In the past the latter has been segregated into rather broad grades covering several grades of the Universal Standards for American Upland cotton. Under the new scheme the lb. of lint cotton is the unit con-

sidered in arriving at the bounty; hence it is necessary to grade the seed cotton on the basis of the resultant grade of the Universal Standards it will produce. This is an improvement on the previous system used, in that the segregation of the cotton into more grades will not only enable the grower to obtain more closely the true value of his crop, but a greater uniformity of the contents of each bale of lint will be secured. The new system has called for very careful work on the part of the graders of the seed cotton, but has worked satisfactorily and should keep the grading on a very high standard. In addition to the usual preparation of boxes of grade standards for classing and delivering the crop, a large number of type samples for both grade and staple have been prepared for the Cotton Board.

Insect Pests and Diseases.

A remarkable freedom from insect attack throughout the season has been noted.

The corn-ear worm (*Heliothis obsoleta*), with the exception of an attack in the South, has been responsible for very little damage.

Cutworms and wireworms were in evidence in some localities, and in some cases slight losses of stand were sustained, but not sufficient to affect the normal spacing at thinning time.

The yellow peach moth (*Conogethes punctiferalis*) was observed during the harvesting period, but was unable to do any real damage on account of the early maturing of the top crop of bolls.

The occurrence of light brownish or yellowish spots in both the seed cotton and lint has continued this season on a very disturbing scale. Identifications made by Mr. Morwood, the mycologist in charge of cotton disease investigations, indicate that the angular leaf spot disease may have caused a large amount of this trouble. Experiments investigating possible means of control will be conducted in the coming season.

Acknowledgments.

The Principal of the Queensland Agricultural High School and College again has kindly made land available for breeding plots of several varieties of cotton, and loaned students to assist in various operations connected with the work.

The Agricultural Chemist and various members of his staff have given valuable assistance during the year, especially in regard to soils and grasses. The information obtained in the soil-moisture and nitrate studies has been most helpful in interpreting the results realised in the cotton investigations of this season.

I am also greatly indebted to the Director of Agriculture for making available the services of several of his officers in the Northern Division to test the most likely varieties of cotton in the tobacco areas, as a possible rotational crop, and in some of the drier sections of the North where cotton-growing may be a profitable enterprise.

W. G. WELLS, Director of Cotton Culture.

REPORT OF THE DIRECTOR OF FRUIT CULTURE.

Weather conditions throughout the fruit-growing districts of the State during the past twelve months were variable; although in comparison with the bountiful season the year before they may be summed up generally as adverse. Spring rains were delayed, and although good falls were experienced during the summer they were in most instances too late to ensure big settings of fruit. From the marketing aspect, however, the seasonal conditions reacted in the growers' favour, and, on the whole, better prices were maintained.

Although, due to various causes, no one branch of the industry can be singled out as being really properous, the pineapple growers are probably in the most sound position, and the banana producers in the worst.

Banana Industry.

The banana industry presents a difficult problem. There are approximately 40,000 acres of bananas now existent in Queensland and New South Wales, of which each State has about half. In ordinary circumstances, such an area should produce in the vicinity of 2,000,000 cases of fruit, whilst the estimated Australian consumption is only 1,000,000 cases per annum. The position thus reveals a tremendous surplus which has been growing for several years, resulting in lower and still lower prices. The climax is likely to be reached during the summer of 1935-1936, when the enormous areas planted during several years past will reach maximum production. The natural result will be that those growers situated in less favourable areas must give up banana growing, and such being the case, Queensland growers are likely to fare somewhat better than those of New South Wales, since the banana is essentially a tropical plant and thrives better under our warmer conditions.

Conferences have been held and efforts made to foster a greater public demand for bananas, and it is probable that united action will shortly be taken to improve the quality of the fruit offered for consumption. To do this it will be necessary for the States to adopt and enforce uniform grade standards and to insist on correct ripening under modern scientific methods.

Pineapple Industry.

The production of pineapples during the past year amounted to 812,000 cases, as compared with 861,000 cases the previous year. The decrease can be attributed largely to seasonal conditions, and it is likely that there will be a considerable increase during the ensuing twelve months. Of the above quantity, 321,000 cases were processed at the canneries, and 387,000 cases consumed as fresh fruit. The Queensland consumption amounted to 184,000, and 17,000 cases were exported to New Zealand.

As has been stated, the pineapple branch is probably the soundest section of the fruit industry, and this can largely be attributed to the fact that there is an expanding market for the canned product. Despite the large quantity dealt with by the factories, the growers were in the fortunate position of having all supplies cleared and a demand for more from the United Kingdom market. The industry has undoubtedly been greatly assisted in the matter of export by the grant from the Fruit Industry Sugar Concession Committee's funds of £20,000 for the 1934 season, and growers were thereby assured of a price of 4s. per case at their stations for factory fruit.

The great increase in pineapple production during recent years can be gauged from the following values of export:—

	£
1930-1931	19,968
1931-1932	72,281
1932-1933	55,559
1933-1934	72,462

Last year exports to the United Kingdom totalled £44,484, and to Canada £27,978.

Citrus Industry.

The position of the citrus industry throughout the Commonwealth is one of over-production. In 1930 it was estimated that by 1936 there would be 1,000,000 bushels over and above local requirements, and the need for developing export markets was stressed. Emphasis was also placed on the need for a representative organisation of growers to control and order marketing. In view of this position the embargo on the importation of fruit to New Zealand in 1932 was a particularly heavy one. The Dominion was our most profitable export market, and in 1931-1932 took 261,000 bushels. The position was partially retrieved in 1933 by the lifting of the restrictions to permit the entry of South Australian oranges, and in that season South Australia exported 122,000 bushels. In 1934 the shipment was increased to 164,000 bushels.

The Canadian market was also tried, but did not come up to expectations. Inadequate transport facilities from Western to Eastern Canada were the chief drawback.

Potentially the United Kingdom is the only market of sufficient size and importance to justify the hope that an outlet can be found for our surplus. During 1933 and 1934 the Commonwealth Government endeavoured to foster this trade by guaranteeing to exporters of oranges the reimbursement of their out-of-pocket expenses up to a maximum of 13s. per export case. In 1933 the fruit carried well, and the expenditure incurred owing to the guarantee was £3,000. Shipments under the guarantee amounted to 145,000 bushels, of which 115,000 went to the United Kingdom.

In 1934 the season was abnormally wet, and consequently the fruit was of poor keeping quality and did not carry well. In this year

the cost to the Commonwealth Government under the guarantee was in the neighbourhood of £20,000. Altogether, 483,000 bushels were exported, of which 269,000 went to the United Kingdom.

For 1935 the guarantee system is being replaced by an export bounty of 2s. per export case of 1½ bushels on all oranges exported to the United Kingdom.

Whilst such assistance by the Commonwealth Government tends to relieve the home market temporarily, it is apparent that no permanent good can be achieved thereby. An all-State marketing organisation is urgently necessary, and as steps have recently been taken to set up such a body, it is hoped that assistance of a more tangible nature will be the outcome in the very near future. It is a distinct compliment to the system of orderly marketing adopted by this State for years past that all States have now been asked to consider draft legislation on the lines of the Queensland Fruit Marketing Organisation Act.

The Granite Belt.

The Stanthorpe district did not market as large a tonnage of fruit and vegetables as last season, 17,250 tons being consigned by rail to various Queensland centres and Sydney as against 20,417 tons the previous season. The decrease was due to unfavourable climatic conditions, the district having experienced the most severe season for many years. The growers have had to contend with severe hail damage, too much rain before the New Year, and a drought since. As a result of such conditions, very little fruit was available for export—only 8,000 cases as against 48,000 the previous season. This has been a serious blow to the district, but it is obvious that no good purpose would be served by exporting fruit that does not come up to the standard, and so lose the good name the State has built up for the quality of previous years' exports. In this connection it is pleasing to note the remarks of the Acting Agent-General in London that Queensland apples open up well on the United Kingdom market, and that there have been no serious instances of bruising within recent years. This speaks volumes for the quality of our apples, the thoroughness of the inspection to which all consignments for export are subjected by departmental officers, and for the careful carriage and handling which is supervised by the Committee of Direction of Fruit Marketing.

The grades and standards of apples for export have recently been subjected to revision. Prior to the 1934 season apples were exported under three grades—viz., "Special," "Standard," and "Plain." No restrictions were placed on the number of varieties shipped, and there was no doubt that the presence of over 100 varieties of all "Plain" grade fruit in Australian shipments was one of the principal factors in creating marketing difficulties in the disposal of Australian apples in the United Kingdom and on the Continent.

On the advice of the Apple and Pear Export Council the export of apples for the 1934 season was limited to forty-three specified varieties, and "Plain" grade fruit was eliminated from export. This applied only to apples shipped to the United Kingdom and the Continent, but not to other destinations, to which other varieties could be sent.

Following on consultations with the Apple and Pear Export Council and with the State Export Supervising Officers, the regulations for the 1935 export season were amended, and now provide that forty-five specified varieties may be shipped to the United Kingdom and the Continent, and the grades "Special" and "Standard" have been altered to "Extra Fancy" and "Fancy" in order to conform to the grade markings of other countries competing on the above markets. A clause has also been introduced providing for specified percentages of colour on the fruit classified under the respective grades. The latter provision has been introduced for the first time in order to keep pace with other exporting countries which have this condition in their regulations.

For various reasons it has not yet been possible to introduce a uniform case for use by exporters from all States. Whilst specified types of cases must be used, exporters are allowed to choose which of these types are most suited to their requirements.

According to the report of the officer in charge of the Stanthorpe fruit district (Mr. H. St. J. Pratt), more than half the district was hit by hail more or less severely—practically every thunderstorm had hail in it, and with every storm some part of the district suffered. There were eight or nine storms spread over a period from the 29th October to the 1st March. Some growers were hit by separate storms. The worst experienced was on the 10th December, when the district extending from Thulimbah to Eukey was hit, destroying practically the total crop of fruit and vegetables at the Summit.

These hail storms have naturally caused a lot of distress, and the effect must remain for many years; for apart from the loss of the crop, which caused immediate financial distress, the trees suffered very severely, and it will take several years for some of them to recover.

Hail in any part of the district has an adverse effect on the whole. The hail-hit growers cannot afford to destroy the hail-marked fruit; they must market it and get what they can for it, but unfortunately it reduces the price for the unmarked fruit from other parts of the district.

The drought after the New Year prevented the hail-stricken growers from making a partial recovery from their losses by growing vegetables; but on the other hand, had the weather conditions been favourable there would probably have been such a large quantity that the supply would have been greater than the demand, and prices would have dropped accordingly.

From October to May inclusive the average rainfall for the last fifty-eight years for this period is 22 inches. This season the fall was exactly the average over the period as a whole, but up to the New Year there were 4 inches more than the average, and since then 4 inches less, with only 1½ inches in the last three months. This exceptionally dry weather prevented the growers from sowing green crops for manurial purposes.

Some growers suffered severely from fruit fly, while the losses of others were considerably less than in previous years. Of those who suffered severely, many have only themselves to blame, as they bred the fly through not being thorough enough in the exercise of control measures. This season trapping was made compulsory, and six additional inspectors were temporarily transferred to the Stanthorpe district to enforce the regulations. Unfortunately, the fly was in much greater abundance than usual, and so the results were but little better than in previous years; but on the other hand, had it not been for the additional inspectors and the luring campaign adopted, the fly would have taken a much greater toll, and there would have been but little clean fruit to harvest. It is to be regretted that these special efforts should have coincided with an exceptional infestation of fruit fly. In addition to trapping, very many growers adopted the white oil and nicotine repellant recommended by the Department with very satisfactory results.

Although the fly position is not at all satisfactory, yet this year has proved that, with intelligent trapping and use of repellants, together with the universal destruction of fly-stung fruit, the pest could be reduced to a minimum. The growers, generally speaking, are alive to the efficacy of trapping and picking-up, but unfortunately there is a minority who will not play the game, and are a menace to the district, necessitating severe action on the part of the Department.

There has been but very little disease. Codling moth has been less than for many years; no Irish blight occurred; powdery mildew of the apple is now under control; and very little Black and Green Aphis was present. Brown Rot of stone fruits, however, has been particularly bad, and this disease, together with Plum Spot and Little Leaf (or Rosette) of the apple, are, apart from fruit fly, at present the major problems in the district.

Some growers still persist in marketing apples, pears, and grapes several weeks before they are mature. Such practice lowers price, and when once the market falls, only a distinct shortage will make it rise again. This practice must be stopped, because the conscientious orchardist suffers along with the offender.

During the year a considerable amount of work has been caried out by the Department on the root stock problem. Of six varieties of East Malling apple stocks imported in 1931, Nos. I., II., and IX. can be eliminated as being unsuitable for our purpose, while Nos. XII., XIII., and XVI. all show promise. Stocks raised vegetatively from selected local seedlings are also being tried out, and as the East Malling stocks have been evolved by selection from seedlings on account of desirable characteristics as regards growth, cropping, and resistance to disease, so it is probable that a stock or stocks equal or superior to the East Malling varieties will be obtained from local sources.

Two years ago an officer of the Council for Scientific and Industrial Research was stationed at Stanthorpe for the purpose of experimenting with various stocks, and the officer in charge of the Departmental Branch Office at Stanthorpe (Mr. Pratt) has assisted him in his experiments by placing at his disposal additional supplies of East Malling stocks grown from those imported by the Department in 1931, and also by offering supplies of cuttings from the vegetatively raised stocks from vigorous local seedlings selected over several years.

The services of the Department are each year being increasingly sought for instruction in packing, pruning, grafting, selection of trees, and general orchard management. Sufferers from incompetent pruners and grafters have called attention to the fact that men have contracted for pruning and grafting in the district who have but a very superficial knowledge of the subject, and so have done a considerable amount of damage. In some countries in Europe no man is allowed to engage in pruning, grafting, or budding operations without a certificate of competency issued by the Department of Agriculture. The question of issuing such certificates here is being considered, and in addition it would be an inducement for the rising generation to make themselves proficient in orchard practice, and at the same time be a protection for those orchardists who are unable to do the work themselves.

Grapes.

The grape season in the southern part of the Granite Belt was, so far as prices and the harvesting of the crop was concerned, the most satisfactory vintage for some years. This was no doubt due to the prolonged spell of dry weather experienced during the latter part of the summer, combined with good spring and mid-summer rains which were of great benefit to the vines during their growing period. The crop, though not heavy, was quite sufficient for the vines to ripen during the dry period; in fact, had they borne to their full capacity there would have been a grave possibility of premature leaf fall and consequent scalding of the berries.

The prospect of disease, especially during the rainy period up to Christmas, was rather alarming, and growers were concerned regarding Black Spot, which appeared early and was making rapid headway in the more susceptible varieties; however, the dry weather and absence of dews and fogs checked its progress very considerably, and the damage was confined chiefly to the canes and foliage.

Downy Mildew gave little trouble, though Oidium, especially towards the end of the harvest, attacked the vines, but like Black Spot it was chiefly confined to the foliage, and this to a great extent was no doubt due to laxity on the part of some of the growers who were too occupied at the time in harvesting the crop to give sufficient attention to sulphuring.

Muscats and Gros Colmans, the two main varieties, ripened well, and the bunches and berries were of good quality. The dry autumn favoured the latter sort so far as splitting and cracking was concerned, and they were cut practically to the berry.

The matter of export was not taken up this season. The home market was not over-supplied, and prices generally were satisfactory. A few cases of Muscats packed in cork dust were

sent to England for trial, and another small lot of Purple Cornichon and Waltham Cross are in cold store in Brisbane awaiting the exhibit in the export class at the Royal National Show in August next. It will be interesting as well as instructive to learn how they open up.

It is rather disappointing that growers have not shown more interest in export and have not endeavoured to find outside markets and to test further the carrying quality of their grapes, because in a very few years it is likely to be a subject that will demand serious thought as production increases. The marketing of the Muscat grape will be the chief problem to be faced, as this is the variety that has been mostly planted in the district. The aged stone fruit orchards between Stanthorpe and Wallangarra are quickly going out of existence—each winter a number are being grubbed out—and no doubt a large area will be replanted with vines, the Muscat forming the base of the new vineyards. Also the Italian growers will continue to plant heavily in the future. Other varieties that will be planted this winter will include Censaut, Ullaide, Waltham Cross, Purple Cornichon, Gordo Blanco, Gros Colman, Cannon Hall, Muscat, and Red Hanneport.

The practice of some growers of marketing grapes before they reach full maturity still continues, and though growers generally are very much against it, there is a minority section who are gross offenders each season. The Department is at present handicapped in dealing with the matter while there is no regulation to prevent immature grapes being marketed, though analyses of fruit are being made to determine a suitable maturity standard. As soon as the green fruit, more particularly the Muscats, arrive on the market, there is a decided fall in prices, and weeks elapse before they recover. Thus not only is a considerable loss sustained by the growers as a result, but the grape industry as a whole suffers when the fruit is not presented to the public with its full flavour and true characteristics.

North Coast and Gayndah Districts.

The Instructor in Fruit Culture for the North Coast and Gayndah districts reports:—

Citrus districts along the North Coast generally experienced dry conditions in the early spring, though good rains fell towards the latter end. Trees blossomed somewhat patchily, and a light setting of fruit resulted. During December a hailstorm severely damaged the crop in the Howard-Burrum district, particularly mandarins.

Adverse seasonal conditions and low prices for several years have adversely affected the industry. Prices have been so low that many growers have been unable to afford sufficient materials to carry out fertilizing, pest control, and general orchard programmes. In some instances citrus growing has been abandoned. Consequent upon this tree vigour has been impaired, and though the crop is light, fruits are not sizing as well as they should. Orchards favourably situated and receiving systematic cultivation and an adequate supply of plant foods are carrying good crops of fruit.

Fungus diseases have been prevalent, including Black Spot, Pinking, and Moulds. Brown Spot does not appear to have been quite so severe as it was last year. Fruit fly caused some loss during April, but scale pests were not quite so severe as in past seasons.

The Gayndah district experienced good spring rains and excellent crops of fruit set, which up to December promised a record for the district. Unfortunately hailstorms severely damaged some orchards, and in one or two instances the whole of the crop was destroyed. Generally the orchards have made a good recovery, the trees having put out good growths. Fruits undamaged by hail are well forward and up to the usual high standard.

Scale pests have been numerous, but control measures have been satisfactorily applied. Green Horned Bug appeared in lesser numbers than in previous seasons.

The summer lemon crop has been of excellent quality and realised satisfactory prices. Storage trials with winter lemons carried out under departmental supervision on Mr. F. Robinson's orchard at Gayndah indicated that the practice was a commercial one. At the commencement of the trials on the 7th October the average price per bushel case on the Brisbane market was 4s. 6d., while ten weeks later the stored consignment of seventy odd cases realised an average price of 13s. 6d. per bushel on the Brisbane market.

The budwood plot trees are progressing satisfactorily, though in December they were much damaged by hailstorms; however, the trees have made a recovery and are showing good growth. Indications are that limited supplies of budwood will be available for the spring budding season.

The improved outlook for the pineapple industry is encouraging increased plantings in North Coast and Mary Valley districts. The winter crop was satisfactory, although heavy losses due to Black Heart and Black Speck were experienced. The harvesting of a good summer crop has just been completed.

In many plantations the organic matter in the soil appears to be low, and plants show a wilted appearance. Climatic conditions, erosion, and some cultivation practices appear to be some of the chief factors bringing about this unsatisfactory condition. Pineapple fertilizer plots have been established in the Mary Valley and Woombye districts.

The Central Coastal District.

The year on the whole has not been a very satisfactory one for Central Queensland growers. Unfavourable weather conditions, characterised by a very dry winter, followed by excessively high temperatures and a serious decrease in the usual summer rainfall amounting to a total deficiency of approximately 30·84 inches below the corresponding ten months of the previous financial year, coupled with unsatisfactory markets, have been the principal causes. Rainfall has been of a scattered nature, and in consequence some portions of the district received an altogether inadequate supply of

moisture, while in other parts it was only sufficient to promote a moderate harvest of summer fruits, and the citrus crop was generally light. In recent years markets have had a tendency to weaken considerably, but notwithstanding the setbacks a gradual expansion is taking place in different parts of the Central District.

The kinds of fruit being grown chiefly, in the order of their importance, are as follows:—Citrus (oranges, mandarins, lemons, grape-fruit and limes), bananas, pineapples, tomatoes, passion-fruit, grapes, mangoes, papaws, and custard apples; and in a lesser degree melons, strawberries, rosellas, granadillas, seedling peaches, Japanese plums, pomegranates, avocados, dates, monsteria deliciosa, and Australian nuts. Many fruitgrowers are also giving attention to vegetable growing, and supply the bulk of the requirements for the local market in this respect.

Seedling citrus trees are still in the majority throughout the district, but worked trees are now more in evidence and are mostly utilised when new orchards are being established. In the older orchards in the Byfield district containing seedlings the trees have attained immense size and exhibit no signs of weakening as do many worked trees on attaining little more than half the age.

The quality of fruit for which the Byfield district is renowned is being maintained, due largely, no doubt, to the high annual rainfall which is usual there. In other parts of the Central District not so favoured as Byfield, citrus orchards have suffered severely in consequence of weather conditions during the period under review, and even in cases where irrigation is applied in varying degrees according to the water available the year has been unsatisfactory.

Following a fairly heavy crop the previous year, orchards were subjected to drought conditions until late in the summer, and, although the trees flowered fairly well, lack of moisture was responsible for a very light setting of fruit, a happening which could hardly be otherwise under the circumstances as in many cases the trees were on the point of succumbing at this period.

Bananas.—During the year permits for the removal of 67,010 plants for the planting of new areas to maintain supplies were issued. The average distance between plants adopted by growers here is 10 feet by 10 feet each way, and therefore the approximate total area of new land planted is 154 acres. In the same period approximately 80 acres have been destroyed on account of having ceased to be profitable. The bulk of bananas produced is grown in the Byfield and Yeppoon districts, and is chiefly consumed by local and Western markets. Growers usually market in the bunch, and packing for the Western trade is done by the local fruit merchants.

The effects of weather experienced during the early part of the financial year on the summer crop of pines were not so severe as in the case of other fruits, and a fair crop was gathered. Quality generally, however, was not so good as in other years, and much undersized fruit was in evidence. The winter crop now coming in is rather light. The bulk of the production comes from Gracemere, Tanby, and Yeppoon districts, the firstmentioned predominating as regards quantity, the main variety grown being the common Rough. A fair proportion of the crop from this district is distributed to far western centres, and consignments comprised mainly of the Alexander variety from the Tanby-Yeppoon areas occasionally go to Southern markets. Growers in the Gracemere district enjoy the advantage of being nearer the market than those in other districts, but as a set-off against this Tanby and Yeppon fruit is slightly earlier, for which better prices are obtained.

It has been observed that there is a tendency on the part of some growers to continue growing on the same land without employing fertilizers for too long a period, and this is responsible for much inferior and under-sized fruit finding its way on to the market. In districts such as Gracemere where there is no scarcity of land this practice is not commendable, and those growers responsible for it cause returns from fruit taken from their own adjoining and better areas, as well as those of neighbouring growers, to fall unnecessarily.

Good pines are also produced about St. Lawrence, a market for which is found along the Northern railway and in Mackay.

Considerable attention is given to the cultivation of tomatoes in the area from Gladstone to The Caves, the principal centres being Yarwun, Targinnie, Ambrose, Mount Larcom, Bouldercombe, and The Caves. The bulk of the crop is disposed of on the Southern markets.

Heavy losses resulted from an outbreak of Blight at the middle of last year following cold and rainy conditions which were general about that time. Growers in the Ambrose and Mount Larcom districts were the heaviest losers, as, owing to the climatic conditions experienced there, late planting could not be indulged in. Losses may have been curtailed very considerably had the growers concerned given more attention to spraying in time. They were advised to be on the alert this year, and to put into practice the maxim that "Prevention is better than cure," especially should weather conditions such as those experienced last year be again in evidence this year.

Attention to the cultivation of passion-fruit is being given over a wide area. Production is mostly absorbed within the Central District and as far north as Mackay, returns being an inducement for the planting of new areas in several places in recent times. Fruit fly and Brown Spot are the principal enemies with which growers have to contend.

Grapes.—A gradual extension of the areas planted has taken place during the year. This year's crop, however, was very light owing to unfavourable conditions, and prices fell below those received in previous years. The growth of new wood was also much below the usual. There were no serious losses attributable to disease, although Anthracnose and a little Mildew were in evidence. The popular variety is Snow's Muscat, and quality is comparable with production from outside districts. As a rule the bulk of the crop is disposed of before Stanthorpe grapes reach this market.

Mangoes.—The largest mango orchard contains about 700 bearing trees, while there are a number of other orchards with from 75 to 200 trees. A multitude of fruit types is in evidence, and some possess very desirable qualities. Many of the highly coloured varieties are not so palatable as their appearance would indicate, and growers find that frequently the less attractive looking fruit has the most excellent eating qualities and returns the highest price. By exercising more care in connection with gathering, handling and packing, and by using more suitable containers, growers would obtain an advantage, as the demand for early mangoes that carry well appears to be improving in Southern States in recent years. Effort expended to increase the popularity of mangoes in the Southern States is proving worth while, and there is presented the possibility of converting considerable waste at present into value. With this end in view growers are being urged that only the best types of fruit should be selected for propagation. The fruit is easily produced but is assailed by numerous pests, which, however, are not beyond control.

Papaws.—In the majority of instances this fruit is a side-line to other larger scale enterprises. There are, however, a number of growers giving special attention to it in the Yarwun, Rockhampton, and The Caves areas, and returns have been quite satisfactory. Excellent papaws are being grown in the Yarwun and The Caves districts, and consignments from the former are sent regularly to the Southern markets. Nematode, moths and flying foxes are the principal pests with which growers have to contend.

Attention to the growing of custard apples is given principally at Sandhills and Boldercombe, and small groups of trees are encountered in other areas throughout the district. The local market consumes the whole of the production up to the present. Variety is almost entirely confined to the Sweet Sop (*Anona squamosa*) and trees are all seedlings. Odd trees of the Cherimoya (*Anona cherimolia*) are being tried out in different localities, but so far its bearing habit under present conditions does not justify extension. Further experiment is to be undertaken with this subject later in order to determine if better bearing habit can be induced.

The Bowen District.

During the last year the rainfall has not been satisfactory from the point of view of frequency nor as regards amount, particularly in the Bowen district and districts through to Townsville. Proserpine and Mackay districts fared much better, heavy rainfalls occurring there in February, which greatly benefited bananas and other fruits, and especially sugar-cane. Only 11·66 inches of rain have fallen at Bowen since the 1st January in generally light and scattered rains. A good soaking rain is needed to ensure good growth from early planted tomatoes and plantings yet to go in.

During the year 132,929 cases of tomatoes have been sent from this district, which amount is an approximation to that sent for the previous year to date. The quality of the fruit was generally very good, Globe and Break of Day being grown in preference to the Buckeye and Denisonia previously grown. Black Spot was not so troublesome as in previous years, and only a light infestation of Irish Blight occurred. Prices generally were better than in previous years.

Mangoes bore well and produced good fruit, which found a ready sale in the Southern markets. On account of the tendency to pick green and the rough methods of harvesting, the common varieties are generally not satisfactory and tend to spoil the market for the better-class mangoes which are sent. More cases were sent during the previous year, and there is a steady expansion in the number of bearing trees.

Pineapples were of good quality and realised good prices. The number of cases sent South was approximately the same as last year and production remains about stationary.

The number of cases of cucumbers exported showed an increase over the previous year.

Citrus growing is now carried on only for local markets, and there is little prospect of any extension. Good fruit is produced where proper attention is given to the orchards.

Throughout the Mackay and Proserpine districts bananas are now only approximating local requirements. Bananas grown at Bowen with the aid of irrigation and through to Alligator Creek under the same conditions are intended chiefly for local and Townsville markets.

The Northern District.

Weather conditions in Northern Queensland were very variable during the year, the usually wet period at the beginning of the year on this occasion being characterised by dry conditions.

The citrus crop generally is a good one, but the mandarin crop is lighter than the orange crop. Around Cairns early oranges have been on the market since the end of February. The fruit is marketed as it is picked from the trees, with a very green skin, and no attempt at artificial colouring being made. It presents an unattractive appearance in comparison with that imported from the Southern States. The latter—last season's Valencia Late variety—although highly coloured is actually often of inferior quality as regards juice content and sweetness to the locally-produced new season's green-skinned fruit, but the well-coloured fruit attracts the eye of the buyer. The judicious use of artificial colouring for early oranges would be a remunerative proposition for Northern citrus growers.

Fruit fly was active among the early oranges, the loss from this pest being considerably greater than it should have been owing to the difficulty of getting growers to recognise the need for strict and scrupulous orchard hygiene.

Bananas suffered considerably from the hot dry winds of January and February. Around Rollingstone, where the shade temperature reached 120° at the height of a heat wave, mature banana plants and bunches were completely blackened as if scorched by fire, whilst newly set plants were practically burnt out.

Right throughout the Northern district banana plants with sun and wind scorched leaves were everywhere noticeable.

The harvesting of the summer pineapple crop was completed in North Queensland at Magnetic Island early in February. The crop for Magnetic Island amounted to about 6,000 cases. In that area, as well as in the Cairns area, many of the plantations could be improved by the ploughing in of green crops and the greater use of artificial fertilizers.

Granadillas blossomed heavily, but at first the fruit setting was comparatively light. The hot dry weather was responsible for sterility of the flowers, as even hand-pollinated blossoms failed to set. Later in the year, however, vines set a good crop of excellent fruit.

Sugar Apples.—Except where watered or irrigated, these fruit were rather small, although the crop was a fairly heavy one. This variety of Anona is the most common one grown in North Queensland, and grows very readily from seed. It will produce a small crop of fruit in about four years. The fruit is very sweet and of delicious flavour, but contains a large number of seeds. Unfortunately it ripens rapidly on reaching maturity, and is consequently not a good commercial fruit.

The dry weather of January and February enabled the grape crop to be completely harvested without loss from rain cracking, which is usually pronounced during the later part of the Tableland grape season.

Persimmons of exceptionally fine quality are grown in the Herberton district. With a wider knowledge and appreciation of this fruit by the Northern public a profitable side-line will be developed by fruit-growers on the Upper Tablelands, as, being only a few hours' journey from Cairns, the fruit is capable of being left on the trees until practically fit for use, resulting in a fine flavoured fruit.

Banana Industry Protection Board.

The Banana Industry Protection Board satisfactorily continued the supervision of banana growing in the State.

The control of Bunchy Top was effective in preventing any further movement northward, and the intensive inspection in the quarantine area is still being maintained.

The precautions with regard to the removal of suckers are still being enforced in order to prevent the introduction of Thrips (*Scirtothrips signipennis* Bagn.) into districts where so far its presence has not been reported. During the planting season just over 900 permits covering approximately 912,000 suckers were issued to growers, so that the total planting would not be one fourth of that of the preceding year.

Approximately 4,500 acres of bananas were or are being eradicated, mainly owing to disease and to reaching a stage when they were no longer profitable. A special drive is to be made, and it is probable that during the coming winter several thousands of acres of further neglected and unprofitable banana plantations will be eradicated, thus removing a potential breeding ground for disease.

Citrus Budwood Scheme.

The citrus budwood scheme, introduced for the standardisation and improvement of the quality and type of citrus fruits in Queensland, is proving remarkably successful, and trees worked with budwood specially selected from approved trees by departmental officers are now available at the various nurseries. During the year 85,470 selected buds and about 100 lb. of selected seedling orange and rough lemon seed were ordered and supplied to nurserymen. When the regulations were first introduced in Queensland there was open hostility to them in some quarters, but it is now generally admitted the scheme has been a most progressive step and there is a decided improvement in the quality of trees being sold. Also the Commonwealth Citrus Investigation Committee recently passed a resolution that all States should adopt legislation for the control of citrus trees from nurseries.

Fruit Packing and Marketing.

During the year packing instruction classes for children and adults were continued, several fruit packing charts and pamphlets on packing and marketing were issued, market inspections and advices to growers and agents for the better handling of fruit received considerable attention, while cold storage inspection was not the least of the services rendered. Experimental work in storage and various types of packs, water core in apples, stalk marking, &c., were included, and investigations into fruit cases with a view to improvement were also made.

Classes for school children were conducted at the following centres:—

Citrus Packing.—Howard, Gayndah, Elimbah, and Tamborine Mountain. In addition to these, school children's classes were also operated for the Department of Public Instruction at Montville, Flaxton, Mapleton, Yandina, Nambour, Woombye, Palmwoods, Chevallum and Buderim Mountain.

Tomato Packing.—Classes were conducted in the Redland Bay district at Redland Bay, Victoria Point, Cleveland, Thornlands, and Russell Island; in the Stanthorpe district at Amiens, Ballandean, and Severnlea; and at Yarwun for adults.

Apple Packing.—Classes were conducted in the Stanthorpe district at Dalveen, Thulimbah, The Summit, Applethorpe, Severnlea, Eukey, Amiens, Bapaume, and Pozieres. Lectures on apple export and local marketing were delivered at the Stanthorpe Rural school, Glen Aplin, and Ballandean.

Packing Charts and Pamphlets.—Additional packing charts have been issued covering apple packing in the standard export case and the Australian Dump case. A lemon chart is in course of preparation. A comprehensive pamphlet on orange packing and marketing was issued. Apple and mandarin packing pamphlets are in course of preparation, and a banana packing pamphlet will also be published at an early date.

Export.—Owing to hailstorms in the Stanthorpe district export overseas this year totalled only 8,000 cases as against 47,000 cases for the 1934 season. It is pleasing to note that during the year the Commonwealth Department of Markets adopted in their market standards two recommendations from Queensland.

Market and Cold Stores Inspections.—Market inspections have been carried out in conjunction with instructions to growers, consignments being watched through the whole of the marketing operations. Cold store inspections were carried out at the request of some of the Stanthorpe apple growers, resulting in a considerable saving from waste fruit through keeping too long in the cold store.

Experimental.—Experiments are in progress and have been carried out in the storage of fruit affected in various ways with water core and other growing and harvesting disabilities. A new case for the marketing of bananas in bushel lots has been evolved, and approval has been given by the Banana Industry Protection Board.

Experimental Work.

There is urgent need for much experimental work in connection with fruits grown in Queensland, and a number of trials have been commenced.

Bananas.—In connection with the banana industry the available virgin jungle land is becoming very limited in Southern Queensland, and in a short time banana growing will not be such an easy matter as it has been up to the present. More intensive methods of cultivation and fertilizing will be necessary, and to be ready to meet the altered conditions experiments with fertilizer and green crops have been undertaken in several districts.

The experimental plot of banana varieties at Moggill, which includes the Vie Ma Ma plants obtained from Fiji, has been enlarged by the addition of two more varieties, and considering the dryness of the weather the plants have made splendid progress. During the ensuing year most of the Fijian plants will bear fruit, when a preliminary comparison with local varieties of similar character will be possible.

Pineapples.—The experimental work with sulphate and muriate of potash on pineapples to determine the relative merits of these fertilizers on the keeping quality of the fruit are progressing and have been extended to other pineapple districts. So far as the experiments have progressed the indications are that in storage for periods up to three weeks there is little or no difference between the keeping qualities of the fruit grown with either fertilizer. One lot of fruit was sent to Victoria in order that it might be tested under the usual transport conditions, and when the fruit was examined at the Department of Agriculture in that State three weeks after picking in Queensland, the report stated in effect that any differences in the pineapples as a whole were only noticeable after a very close inspection. This agreed with the conclusions arrived at with similar fruit kept under observation in Queensland. The experiments are of considerable importance in view of the difference in price of several pounds per ton between sulphate and muriate of potash, and the accepted knowledge of past years that the sulphate, which is the dearer, should always be used in preference to the muriate because the latter had a tendency to make fruits softer and consequently of poor carrying quality.

Citrus.—The fertilizer trials on Tamborine Mountain produced remarkable results last season when all the fertilized trees carried greatly increased crops. In some instances the crop was increased by 200 per cent. in comparison with that of the previous year. The experiments are being further continued.

Queensland Nuts.—The experimental plot at St. Lucia is making rapid growth. A second acre of trees was planted during the year for propagation experiments.

Fertilizer trials with Queensland Nut trees have been commenced at Glasshouse Mountains and Tamborine Mountain with a view to ascertaining the most suitable manures to use. The application of superphosphate to young trees has given a splendid response to date.

Dates.—The experimental plot of dates established at Roma is making good progress, and an additional plot of two acres has been planted with selected suckers in the Barcaldine district.

Staff.

Officers of the Branch have carried out their duties in a capable and efficient manner, and their efforts to further the interests of the orchardist are appreciated more and more each year.

H. BARNES,
Director of Fruit Culture.

ANNUAL REPORT OF THE DIRECTOR OF DAIRYING.

Favourable conditions for dairying were again experienced during the past year throughout the dairying areas of the State, with the result that a further record in butter production has been made. The early winter period of the present year has not been so advantageous as that of last year, however, and without further general falls of rain it is likely that the cattle will not winter as well as during 1934.

The operation of the Stabilisation Scheme has enabled factories to maintain comparatively satisfactory pays, a factor which has been responsible to a great extent for the continuance of many in the industry and the entry of others from less remunerative fields.

Butter Production.

The quantity of butter manufactured amounted to 130,233,768 lb., which represents an increase of 6,315,511 lb. over that of the previous highest production.

The following table shows the monthly production of butter during the period:—

Butter Production, 1934-35.

	lb.
July	6,155,424
August	6,813,619
September	8,591,357
October	11,996,556
November	13,364,307
December	16,752,628
January	17,988,818
February	14,466,662
March	13,461,379
April	9,338,175
May	6,532,083
June	4,772,760
Total	130,233,768

Markets.

Approximately 75 per cent. of the butter manufactured in the State was exported overseas, Great Britain absorbing practically the whole of the export quota. The prices ruling on the London market for our butter did not greatly exceed the average price realised during the previous year, and it is felt that this year's average realisations will have to be regarded as normality in future. For a brief period, while America was operating on the market, the price of over eighty shillings (80s.) per cwt. was realised, but with the cessation of purchases from the United States of America prices soon fell to an average of seventy-five shillings (75s.). It is noteworthy that this was the price received for the first shipments of butter from this State during 1895. Danish butter still realises much higher prices than Australian, particularly during their winter season. However, the price margin diminishes during their summer flush, a factor which indicates that continuity of supply must always be regarded as a potent factor in our market stability.

Grading of Butter.

During the past year State and Commonwealth graders have co-operated fully in the grading of our output, which has shown a slight improvement in quality. The following table indicates the quality of the butter graded:—

Butter.

Salted and Unsalted.

Month.	Choice.	First.	Second.	Third.	Total.
	Lb.	Lb.	Lb.	Lb.	Lb.
July	25,136	26,562	1,754	160	53,612
August	43,350	34,084	2,881	550	80,865
September	41,387	49,795	5,048	1,426	97,656
October	59,124	96,526	11,209	1,920	168,779
November	68,535	81,218	12,638	1,099	163,490
December	64,764	111,095	14,946	1,963	192,768
Six Months	302,296	399,280	48,476	7,118	757,170
January	49,147	195,256	26,568	8,294	279,265
February	14,115	158,003	19,718	6,504	198,340
March	42,101	113,700	12,212	1,236	169,249
April	31,738	66,293	6,720	1,118	105,869
May	44,034	33,646	4,787	979	83,446
June	30,608	5,038	1,311	102	37,059
Six Months	211,743	571,936	71,316	18,233	873,228
Totals	514,039 (31·5%)	971,216 (59·5%)	119,792 (7·4%)	25,351 (1·6%)	1,630,398

CHEESE.

Month.	First.	Second.	Third.	Total.
	Lb.	Lb.	Lb.	Lb.
July	1,421	1,316	44	2,781
August	2,006	2,673	13	4,692
September	1,806	2,082	21	3,909
October	1,792	3,986	371	6,149
November	1,670	3,678	248	5,596
December	1,347	3,513	488	5,348
Six Months	10,042	17,248	1,185	28,475
January	1,559	6,581	541	8,681
February	490	4,619	612	5,721
March	874	4,047	156	5,077
April	1,030	2,426	73	3,529
May	765	1,194	50	2,009
June	399	538	27	964
Six Months	5,117	19,405	1,459	25,981
Totals	15,159 (27·8%)	36,653 (67·3%)	2,644 (4·9%)	54,456

The improvement in the character of the butter, which was noticeable last year, has been maintained. The tendency to extravagant processing which was making our butter lose its character has been fortunately checked. This has also improved its spreadability, a very important factor on the English market.

Although from a manufacturing point of view the position may be regarded as satisfactory, there is ample evidence that greater attention must be paid to the raw material. The elimination of a very considerable amount of second grade butter and an increase in the choice output is desirable, for, notwithstanding the degree of excellence attained in manufacture, the factory must receive good cream if it is to make good butter.

The check on the quality of butter sold on the metropolitan market has been maintained, and in the examinations disclosed a slight improvement on the standard of previous years.

CHEESE PRODUCTION.

While butter production has increased remarkably over the last few years, there has been no extension of the cheese industry. During the past year an amount of 12,185,276 lb. of cheese was produced in the State, which was slightly lower than the average over several years past. The quality of cheese submitted for export early in the season was poor, but an appreciable improvement was noticeable towards the end of the export season. It has been observed that white cheeses have been graded better than coloured. Preliminary examinations have failed to disclose the cause, and the Department is at present conducting several experiments so that definite conclusions may be arrived at.

The following table shows the quantity of cheese manufactured each month during the period:—

CHEESE PRODUCTION, 1934-35.

	lb.
July	891,436
August	976,041
September	1,172,590
October	1,277,902
November	1,222,490
December	1,421,687
January	1,506,627
February	1,165,922
March	989,108
April	624,071
May	479,731
June	458,714
Total	12,186,319

QUALITY OF RAW MATERIAL.

Many factors have been operating in the industry against efficiency. With the ever-present prospect of restriction on supply to the United Kingdom and the restrictive tariffs with which European countries have endeavoured to nurse their own milk production, the future of our dairying industry is clouded. It is obvious that restriction, should it be imposed, must first affect our secondary butters, so concentration on their elimination will be an advantage to the industry economically. As an outcome of the recent conference with representatives of the dairying industry, the Department and the co-operative associations will be co-operating to attain this objective. It is expected that appreciable improvement in quality will result when the recommendations from the conference are operating.

The basis of the improvement must necessarily be on the farm, but transport conditions and factory practices must be adjusted so that the efforts of the farmer producers are not nullified after the cream is removed from their control.

Research Work.

During the past year much good work has been accomplished by the Dairy Bacteriologist and Chemist, whose investigatory work has been aided by the services of the staffs of the Agricultural Chemist and the Animal Health Station. With the projected opening of the new Dairy Science Laboratory and the employment of a staff of bacteriologists working wholly on dairy products, investigations in the coming year should form the beginning of a new era in the history of Queensland dairying.

The lack of a well-equipped dairy laboratory has been a long-felt want in the industry. From time to time many troubles of obscure origin come before the notice of the instructional staff, which has experienced great difficulty, through want of proper facilities, in making an early diagnosis of the cause of the defects. With the assistance of a trained staff of dairy bacteriologists and chemists many of the difficulties experienced in the past will be eliminated to the economic advantage of the dairy farming community.

A report of the work of the bacteriologist is attached.

Dairy Science Schools.

The short refresher courses of instruction for factory operatives have been held during the current year at Toowoomba, Dalby, Malanda, and Gladstone, while the programme arranged provides for schools at Wondai and Pittsworth in addition. These schools, which are attended also by other interested parties, have proved very popular, and form a very desirable link in the educational chain.

Rebate Scheme.

The Dairy Cattle Improvement Rebate Scheme under which rebates of railway freight are granted to dairy farmers purchasing young bulls whose dams have qualified on a production basis over the 273 days test has been continued during the past year, when an amount of £310 6s. 11d. was granted by way of rebates.

This scheme has done much to bring promi nently before dairy farmers the advantages of breeding along production lines.

Grade Production Recording.

While the number of cows submitted to test during the past year has been somewhat lower than that recorded for the previous year, the work has probably been more effective, as a greater number of full lactation periods have been completed. Although the work of this section has considerably increased since the introduction of the scheme, involving the co-operation of the dairy associations, it is surprising what a small percentage avails itself of the testing facilities offered, especially considering that the service is free.

Factory Records.

The inspection of the factory books of accounts has revealed that the provisions of the Dairy Produce Act relative to the payment of overrun have been observed by the various dairy associations. The uniform financial statements, now in use by all companies, present the business of each association in a form which is readily appreciated by the shareholder suppliers.

The report of the Inspector of Accounts is attached.

Dairy Cattle Improvement Act.

The educational activities inaugurated under the Dairy Cattle Improvement Act have been continued, while a new feature in the form of field days has been added during the past year. Several further schools of instruction, to which leaders of the dairy committees are invited, have been held, making a total of eleven schools to date, which have been attended by 114 leaders. Fifteen field days have been held during the last two months. These will be continued from September onwards to cover all dairy committee centres. Dairy committees generally have been most enthusiastic in respect to these educational activities, and have highly appreciated the services of the officers attending the field days. For the first series a uniform type of programme comprising phases of Dairy Economics, Dairy Science, and Veterinary Science is being followed.

Veterinary Section.

During the year under review two additional veterinary surgeons have been appointed, and in accordance with the decentralisation policy, have been stationed at Rockhampton and Atherton, with supervision over the Central and Atherton Tableland districts respectively. These officers are primarily concerned with the health of dairy cattle in those areas. Under the Dairy Cattle Improvement Act the Department has additional veterinary surgeons stationed at Brisbane and Toowoomba. Their services have been in great demand by dairy farmers, who are now more appreciative of the economic losses which are annually sustained in this section of animal husbandry.

Retirements.

During the year under review the Dairy Branch has lost the services of two of the dairying industry's pioneering officers, namely, Mr. C. F. McGrath, Supervisor of Dairying, and Mr. F. J. Watson, Dairy Instructor. Both of these officers were associated with the travelling dairies instituted during the regime of Mr. Hulme Black as Minister of Agriculture, and since that time have given unremitting attention to the improvement of the industry in this State. It has been my pleasure during the whole of my official life to be associated with them, and it is with regret that I have to record their retirement.

H. HEERS,
Director of Dairying.

STAFF REPORTS.

Chemistry and Bacteriology.

Mr. O. St. J. Kent, Dairy Science Officer, reports:—

A dairy research laboratory is now under construction, and should be ready for use early in the new financial year. The laboratory has been well planned, and when completed, will be equipped and staffed to carry out a wider programme of work than has been possible hitherto.

Laboratory Work.

During the year conditions for laboratory working were somewhat upset owing to the constructional work that was in progress on the laboratory and new Agricultural Building. Several investigations of importance, however, have been carried out, which have yielded inter-

esting and informative results. An investigation into fat losses in buttermilk in Queensland factories has involved a considerable amount of work. Some 800 samples of buttermilk from thirty-seven different factories have been analysed, and details of the manufacture of butter relating to each sample have been secured and recorded. This investigation has been temporarily suspended, but will be continued at an early date. Some very useful data has been collected, and when the final results are fully correlated it is expected that useful suggestions and advice will be available for the factories, which should enable them to minimise their fat losses. The average fat loss in buttermilk on all 805 samples examined so far is ·68 per cent. The best factory showed an average loss of ·51 per cent., whilst the highest average loss was ·96 per cent. It has been interesting to note that during the course of the investigation the latter factory has shown an improvement by reducing its loss from 1·09 to ·88 per cent., evidently due to more efficient managing as a result of information forwarded in periodical progress reports. This investigation has created considerable interest among the factories, and the willingness with which they co-operated shows that appreciation of this type of work is not lacking with the factory managers.

Another interesting investigation was carried out on 31 butters, which were subjected to an eight weeks' storage test. These butters were fully examined for their chemical and bacteriological properties before going into cold storage and similarly examined after eight weeks. In addition, the butters were graded and points awarded before and after storage. This investigation has given definite lines upon which to work on butter, so that storage and export qualities may be closely watched.

Other materials utilised in butter and cheese factories have been submitted for examination.

Field Work.

Butter and cheese factories have been visited from time to time to deal with troubles that have arisen in the factories. These visits entailed work not only at factories but also in the laboratory, as samples had to be brought back and fully examined. Examination of water supplies at various factories during the year indicated that the water problem for butter factories is one that will need a lot of investigation during the coming year, as the quality of our butter suffers considerably from after-contamination with water of unsuitable quality.

Examination of refrigerating brines showed that the laboratory can be of great assistance to factories in maintaining their refrigerating plants in good condition, with the greatest possible saving in refrigeration and reduction in losses through corrosion of pipes and equipment. A number of factories avail themselves of this service by forwarding regular samples for examination.

Dairy Science Schools and Field Days.

A programme of Dairy Science schools was arranged for six different dairying centres of the State. Five have already been conducted at Toowoomba, Dalby, Malanda, Gladstone, and Wondai. The sixth is to be held at Pittsworth. These schools have been held primarily to give instruction to the butter and cheese factory employees. The attendances have been excellent, as can be seen from the fact that 162 different persons attended the five schools mentioned above. It is felt that these courses of instruction are of vital importance, and will assist materially in increasing the technical efficiency of the men who attend.

In addition to these schools, assistance has been given to field days for farmers.

Dairy Library.

A number of books have been added to the library list during the year. It is hoped this year to increase the number of books and to secure periodicals on dairying so that a good reference library may be gradually built up.

Factory Accounts.

Mr. G. B. Gallwey, Inspector of Factory Accounts, reports:—

Inspections of accounts of dairy associations from Rockhampton south have been carried out periodically during the year. The distribution of over-run has complied with the regulations.

The survey of the balance-sheets was continued, and the transactions of the butter factories for the year ended 30th June, 1934, showed the following:—

Average cost of manufacture (per lb.), 2.63d.
Number of suppliers, 24,317.
Amount distributed to suppliers, £4,722,688 2s. 3d.
Trade and wages payments, £1,350,662 18s. 2d.
Average price (per lb.), 9.21d.

The cost of production shows a decrease of ·28d. per lb. over last year. The return to suppliers has shown a slight increase for the year.

The effects of the Stabilisation Scheme cannot be appreciated, as the operations only covered two months of the period under review.

Lectures were delivered at Dairy Science schools for factory employees. Field days conducted under the Dairy Cattle Improvement Act were attended and lectures delivered.

Annual Report of Mr. L. Andersen, Senior Herd Tester:—

The season commenced with a very good spring, and the early summer showed wonderful promise for the dairy farmers throughout the State, but unfortunately conditions changed, and instead of the wet season which has been fairly regular of late years an extremely dry period played havoc in all the dairying districts. Even the coastal districts, usually blessed with a generous rainfall, suffered considerably, and our records are correspondingly lower than should have been the case in a normal season.

Many of the dairy associations again rendered assistance by carrying out the testing of milk samples from suppliers submitting their herds for testing.

Approximately 480 herds were tested under this system, and the associations which co-operated in this work were as follow:—Atherton, Caboolture, Chinchilla, Downs, Esk, Gayndah, Killarney, Logan and Albert, Maleny, Oakey, Queensland Farmers, Southern Queensland Dairy Company, Stanley River, Warwick,

Biddeston, Greenmount, Moola, Irongate, Pittsworth, and Quinalow. Altogether, testing was carried out at 35 butter and cheese factories.

In addition it was found necessary to enlist the services of local dairy inspectors to carry out testing work in certain districts where several big associations have not joined in with the movement.

Altogether a total of 810 dairy herds comprising 24,434 cows were submitted and tested.

Early in the season it was anticipated that the record of last year, 982 herds, would be exceeded, but this was not realised. However, when the condition of the dairying districts during the last six months is taken into consideration, the number of herds submitted must be taken as very satisfactory.

While herds were submitted from all parts of the State, the main districts may be grouped as follow:—Darling Downs 186, Moreton 182, Wide Bay 164, Burnett 131, Central 121, and Atherton 26 herds. It will thus be seen that all districts are fairly well represented, from the far North to the New South Wales border.

The most important part of the herd recording scheme is, of course, to furnish owners with the production returns of each individual animal, and the work of computing the yield of milk and butterfat takes up a considerable portion of the time of the herd testing staff.

No less than 14,809 records were computed and forwarded to owners, which was a considerable increase on last year's figures, but this can be accounted for by the fact that many cows which commenced their tests the previous year completed their lactation periods during the year under review.

The average production is shown to be 3,813 lb. of milk and 154 lb. of butterfat.

The mean return per cow last season was 161 lb. of butterfat, so that in spite of adverse weather conditions this year's general average is only 7 lb. of butterfat lower.

Some very excellent herd averages are recorded, and for the first time under our Grade Herd Scheme we are able to record herd averages of more than 300 lb. butterfat. As is to be expected these figures are obtained from small herds, the highest return being 331 lb. of butterfat for 8 cows, while another herd of 5 shows an average production of 319 lb., and 10 cows produced an average of 319 lb. butterfat per cow. The first two returns are from Darling Downs, while the last one is from Monto district, thus showing what can be done in that district by a progressive dairy farmer.

Records indicate that 17 herds have average productions ranging from 250-300 lb. of butterfat, and 67 herds show productions ranging from 200 to 250 lb. The remaining 723 herds, or 89 per cent., are therefore under the 200-lb. mark, and it follows that a large percentage of these are very much lower still.

It should be the aim of dairy farmers to set a standard of at least 200 lb. butterfat per cow, but unfortunately the returns year by year do not indicate any definite improvement.

Two dairymen residing within a few miles of each other on the Downs have herds with averages of 285 lb. butterfat and 135 lb. butterfat respectively; the first herd has 18 cows, while the second herd has 38. Extending the figures for the full season will show that the smaller herd of cows actually produced 38 lb. of butterfat more than the larger herd containing 20 more cows: No. 1 herd, containing 18 cows, produced 5,130 lb. butterfat; No. 2 herd, containing 38 cows, produced 5,092 lb. butterfat.

In addition to having to provide feed of some kind for the extra twenty cows, the owner of the poor herd must also employ at least one more hand to assist with the milking.

In another district one herd of 40 cows showed an average of 275 lb. butterfat, while the next best herd, with a much smaller number of cows, showed an average of only 150 lb. butterfat per cow.

There is ample evidence in our records to show that the progressive farmer who keeps the testing going regularly and provides a liberal supply of feed for his dairy cows is steadily showing an increase in production per cow year by year.

One herd of 79 cows tested last year had an average production of 223 lb. butterfat. This year the same herd, with 82 cows, showed a production of 224 lb. per cow, while the average production of another herd increased from 168 lb. to 194 lb. butterfat.

The highest yield from an individual cow during the season was 515 lb. butterfat, and although this is not a record it must be looked upon as a very fine yield indeed.

A summary of all production records has been tabulated, into which all cows have been grouped according to their respective production. From this it will be seen that 1,975 cows failed to produce 100 lb. butterfat during the lactation period. While, no doubt, weather conditions are to a certain extent responsible for so low a yield, it is hard to realise that cows of this standard are to be found in our dairy herds, and it is to be hoped that owners will realise that the best place for such cows is the nearest slaughteryards.

In the category of cows yielding from 100 to 150 lb. butterfat we find 5,587 cows, representing 37·73 per cent. of the total. It is surprising to see that the largest percentage of our dairy cows have a limitation of 150 lb. butterfat, and with prices at their present level, very little calculation is necessary to see that these cows are not swelling their owners' banking accounts—4,615 cows, representing 31·16 per cent., yielded an average of 150 lb. to 200 lb. It should be the aim of all dairy farmers to set themselves a standard of at least 200 lb. butterfat, and this could, no doubt, be attained without much trouble, at least in the best dairying districts, provided owners would look on dairying as a business proposition—feed the best, and cull the rest; 12·54 per cent., or 1,857 cows produced from 200 to 250 lb. during their lactation, while the production of 609 cows lies between 250 and 300 lb.; 139 cows produced from 300 to 350 lb.; 20 cows from 350 to 400 lb.; 8 cows passed the 400-lb. mark, one of which produced 491 lb.; and the highest producing animal yielded 515 lb. butterfat.

Both these returns are recorded from the Darling Downs under ordinary farm conditions, without the addition of any concentrates, and this goes to show what can be done in this very fertile district.

Looking over the production returns as a whole in the different districts, it is noted that they correspond very closely from year to year.

The Downs, with an average production of 185 lb. butterfat per cow, is, as usual, well to the front, Moreton, with 154 lb., being next, while Wide Bay and Burnett are level with a production of 147 lb. per cow. Herds submitted in the Central districts show a return of 130 lb. per cow, and twenty-six herds, representing 972 cows, tested on the Atherton Tableland, show a return of 169 lb. of butterfat.

It is quite evident that the Herd Recording Scheme operated by this Department is appreciated by dairy farmers.

Correspondence indicates that the majority of farmers now realise the necessity of testing and improving their herd by means of the Babcock tester.

The market price for our produce is not likely to increase materially for some time to come, and if our dairy farmers are going to remain in business it is necessary for them to raise the average production per cow. Unfortunately the producer has no say in the world market prices, but he can improve his income considerably by increasing the average production of his herd.

We have in our ledgers many herds which have been under test for a number of years without interruption, and although improvements may be slow the average production is gradually rising, and as time goes on this will automatically make for better and happier conditions for the man on the land.

As weather conditions have now changed again for the better it is fully expected that a very busy season is ahead of the Herd Recording Branch, and although a large number of herds are temporarily withdrawn it is expected that the majority will be submitted again during the coming season.

Numerous samples of skim milk have been submitted and tested, and as usual many defects have been rectified. The results in many instances showed heavy losses through inefficient skimming, slow speed, and incorrect setting.

Brisbane milk vendors have also made full use of the branch during the year, and samples submitted from this channel number many hundreds.

Although the city supply is under the control of the Health Department, vendors always seek assistance from this branch when any trouble arises as to quality.

Factory.	Number of Herds.	Number of Cows Tested.	Number of Tests.	Cows completed Lactation.	Average Yield of Milk.	Average Yield of Butter-fat.	Number of Cows yielding from 0 to 99 lb. Butter-fat.	Number of Cows yielding from 100 to 149 lb. Butter-fat.	Number of Cows yielding from 150 to 199 lb. Butter-fat.	Number of Cows yielding from 200 to 249 lb. Butter-fat.	Number of Cows yielding from 250 to 299 lb. Butter-fat.	Number of Cows yielding from 300 to 349 lb. Butter-fat.	Number of Cows yielding from 350 to 399 lb. Butter-fat.	Number of Cows yielding over 400 lb. Butter-fat.
					Lb.	Lb.								
DARLING DOWNS, 1934–35.														
Chinchilla	6	101	206	46	3,484	130	10	24	10	2	..	..	..	..
Toowoomba	39	850	1,776	452	4,813	185	38	101	157	78	48	22	4	4
Dalby	23	573	982	241	4,305	176	15	64	85	51	20	5	1	..
Clifton	11	281	671	85	5,884	240	1	4	14	32	16	17	1	..
Miles	8	288	682	182	3,956	148	51	71	20	2	34	3	1	..
Crow's Nest	6	110	269	37	4,865	182	2	10	11	9	5	..	..	..
Killarney	16	848	2,344	404	4,792	182	18	95	145	76	56	13	1	..
Oakey	12	407	1,103	239	5,325	217	1	35	72	63	45	17	4	2
Millhill	40	1,108	2,732	566	4,427	178	28	153	205	122	49	8	1	..
Allora	3	82	174	40	6,235	223	..	2	14	13	7	4	..	..
Texas	1	52	119	..	..	..	..	..	..	..	..	..	..	..
CHEESE FACTORIES.														
Biddeston	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gowrie Junction	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Moola	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Linthorpe	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Quinalow	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Felton	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Irongate	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sundries—Brisbane	..	..	..	..	..	..	..	..	..	..	..	..	..	..
General Average	19	349	788	163	5,204	208	4	33	44	38	30	10	3	1
Hodgson's Vale	1	39	93	25	5,500	221	..	..	8	13	3	1	..	..
Greymare	1	58	166	62	4,150	165	1	24	25	10	1	1	..	..
Totals	186	5,146	12,105	2,542	..	..	169	616	810	509	314	101	16	7
General Averages	..	..	..	..	4,703	185	..	..	..	..	..	..	..	..
MORETON, 1934–35.														
Beaudesert	30	1,335	3,856	825	3,720	147	110	328	292	84	11	..	..	..
Esk	28	1,170	3,146	689	3,991	153	93	246	246	76	22	6	..	..
Booval	12	195	539	144	3,391	140	26	60	50	8	..	..	..	..
Boonah	12	283	786	257	4,066	172	19	68	88	64	17	1	..	..
Grantham	9	168	364	157	4,172	167	9	49	59	32	6	2	..	..
Laidley	23	523	1,268	241	3,379	136	28	134	65	12	2	..	..	..
Rosewood	5	165	367	100	4,016	159	5	39	42	13	1	..	..	..
Lowood	3	55	113	10	3,550	151	1	5	3	1	..	..	..	..
Kingston	37	1,620	4,397	1,076	3,940	163	98	347	384	201	42	4	..	..
West Moreton—Sundries	23	642	1,755	307	3,437	148	41	113	125	25	3	..	..	..
Totals	182	6,156	16,591	3,806	..	..	430	1,389	1,354	516	104	13	..	..
General Averages	..	..	..	..	3,824	154	..	..	..	..	..	..	..	..

HERD RECORDING—*continued.*

Factory.	Number of Herds.	Number of Cows Tested.	Number of Tests.	Cows completed Lactation.	Average Yield of Milk.	Average Yield of Butter-fat.	Number of Cows yielding from 0 to 99 lb. Butter-fat.	Number of Cows yielding from 100 to 149 lb. Butter-fat.	Number of Cows yielding from 150 to 199 lb. Butter-fat.	Number of Cows yielding from 200 to 249 lb. Butter-fat.	Number of Cows yielding from 250 to 299 lb. Butter-fat.	Number of Cows yielding from 300 to 349 lb. Butter-fat.	Number of Cows yielding from 350 to 399 lb. Butter-fat.	Number of Cows yielding over 400 lb. Butter-fat.
					Lb.	Lb.								
WIDE BAY, 1934–35.														
Caboolture	23	542	1,188	243	3,421	149	23	102	85	33	..	..	..	..
Eumundi	19	414	1,116	414	3,617	145	51	193	124	39	5	2	..	..
Pomona	15	508	1,090	195	3,414	141	14	105	67	8	1	..	..	..
Woodford	8	436	1,239	317	3,402	145	52	137	87	36	5	..	..	..
Maleny	32	1,194	3,333	735	3,763	167	53	239	258	143	39	3	..	..
Gympie	67	1,803	4,336	1,455	3,264	137	281	652	405	96	20	..	..	1
Totals	164	4,897	12,302	3,359	..	..	474	1,428	1,026	355	70	5	..	1
General Averages	..	..	..	..	3,450	147	..	..	..	..	..	..	..	..
BURNETT, 1934–35.														
Kilkivan–Goomeri	21	742	1,854	489	3,359	130	122	222	119	23	3	..	..	..
Kingaroy–Nanango	23	935	2,660	626	4,342	177	44	169	193	147	63	9	1	..
Gayndah Line	19	731	1,717	514	3,443	141	58	266	155	33	2	..	..	..
Mundubbera	30	902	1,929	461	4,565	133	92	222	125	20	1	1	..	..
Monto	38	1,192	2,410	672	3,643	138	93	292	218	54	8	5	2	..
Totals	131	4,502	10,570	2,762	..	..	409	1,171	810	277	77	15	3	..
General Averages	..	..	..	..	3,868	147	..	..	..	..	..	..	..	..
CENTRAL, 1934–35.														
Bundaberg	16	268	476	134	3,081	133	16	77	36	5	..	..	..	..
Gladstone	26	572	1,619	469	3,158	134	118	203	94	46	8	..	..	..
Rockhampton	28	723	2,117	584	2,603	113	204	305	72	3	..	..	..	..
Wowan	51	1,098	2,780	654	3,439	141	138	251	185	65	14	1	..	..
Totals	121	2,661	6,992	1,841	..	..	476	836	387	119	22	1	..	..
General Averages	..	..	..	..	3,076	130	..	..	..	..	..	..	..	..
ATHERTON TABLELAND, 1934–35.														
Atherton	26	972	2,628	499	4,035	169	17	147	228	81	21	4	1	..

SUMMARY OF HERD RECORDING, YEAR 1934–35.

District.	Number of Herds Tested.	Number of Cows Tested.	Number of Samples Tested.	Production Returns Computed.	Average Yield of Milk.	Average Yield of Butter-fat	Number of Cows yielding from 0 to 99 lb. Butter-fat.	Number of Cows yielding from 100 to 149 lb. Butter-fat.	Number of Cows yielding from 150 to 199 lb. Butter-fat.	Number of Cows yielding from 200 to 249 lb. Butter-fat.	Number of Cows yielding from 250 to 299 lb. Butter-fat.	Number of Cows yielding from 300 to 349 lb. Butter-fat.	Number of Cows yielding from 350 to 399 lb. Butter-fat.	Number of Cows yielding from 400 to 449 lb. Butter-fat.	Number of Cows yielding from 450 to 499 lb. Butter-fat.	Number of Cows yielding over 500 lb. Butter-fat.
					Lb.	Lb.										
Darling Downs ..	186	5,146	12,105	2,542	4,703	185	169	616	810	509	314	101	16	5	1	1
Moreton	182	6,156	16,591	3,806	3,824	154	430	1,389	1,354	516	104	13	..	..	..	..
Wide Bay	164	4,897	12,302	3,359	3,450	147	474	1,428	1,026	355	70	5	..	1	..	..
Burnett	131	4,502	10,570	2,762	3,868	147	409	1,171	810	277	77	15	3	..	..	..
Central	121	2,661	6,992	1,841	3,076	130	476	836	387	119	22	1	..	..	..	..
Atherton Tableland ..	26	972	2,628	499	4,035	169	17	147	228	81	21	4	1	..	..	..
Totals	810	24,334	61,188	14,809	..	..	1,975	5,587	4,615	1,857	608	139	20	6	1	1
General Averages	..	..	..	..	3,813	154	(13·336 per cent.)	(37·727 per cent.)	(31·163 per cent.)	(12·54 per cent.)	(4·106 per cent.)	(0·937 per cent.)	(0·135 per cent.)	(0·041 per cent.)	(0·007 per cent.)	(0·007 per cent.)

REPORT OF THE CHIEF ENTOMOLOGIST.

I have the honour to submit herewith a report of the work of the Division of Entomology and Plant Pathology for the year ended 30th June, 1935. The entomological activities of the Division are discussed by myself, the plant pathological work being reviewed by Mr. J. H. Simmonds.

Staff and Accommodation.

Toward the end of the year Mr. T. H. Strong, Assistant to Entomologist, resigned to accept an appointment at the Waite Institute, Adelaide, and on 30th June the temporary appointment of Mr. A. A. Girault, Assistant Entomologist, expired with the effluxion of time. Mr. W. J. S. Sloan, who joined the staff as Assistant to Entomologist during the previous departmental year, was transferred to Rockhampton during November and is now in charge of the new entomological field station at that centre.

Early in January Mr. L. F. Mandelson, Assistant Plant Pathologist, left Australia on a visit to the tobacco growing areas of the United States of America and is expected to remain overseas for a period of ten months. Although he is naturally giving considerable attention to pathological problems in tobacco while abroad, Mr. Mandelson is inquiring into all aspects of the production of that crop. This valuable overseas experience has been made possible by a grant from this State's share of the Commonwealth Tobacco Fund.

During June a considerable amount of repainting and repairing of the Nambour accommodation was carried out and two large field cages were supplied for use in the entomological investigational work at that centre. Necessary minor repairs and alterations were also carried out in the Brisbane laboratories.

Plague Grasshopper.

The outstanding entomological event of the year was the very menacing outbreak of the plague grasshopper, *Calataria terminifera* Walk. Large hatchings of the overwintering eggs of this species occurred during the month of September and the insect rapidly assumed pest proportions throughout a large section of the State, the species occurring in varying degrees of intensity and at different centres from the Queensland-New South Wales border between Texas and Eulo to as far north as Selheim, Hughenden and Julia Creek. Infestation, of course, may also have occurred outside the area just indicated but it was noticeable that the coastal and near coastal districts were apparently not involved in the outbreak.

The most seriously infested centres were in the Goondiwindi, Inglewood, Milmerran and Pittsworth districts, and a survey of the position in these areas clearly demonstrated the necessity for a large scale baiting campaign. The actual position in the field was personally investigated by the Minister during the course of a visit to the Goondiwindi district, and following thereon it was decided that the Government would make bran, arsenic pentoxide, and molasses available free of charge for this particular baiting campaign, the co-operation of the appropriate district authorities and affected pastoralists, graziers, and farmers being sought and obtained for the distribution and application of the bait. Experiments with, and demonstrations of the efficiency of the bait recommended were carried out at many centres, the organisation of the grasshopper campaign being in the hands of Mr. J. A. Weddell, Assistant Entomologist. At various times during the course of the campaign he was assisted by Messrs. N. E. H. Caldwell, W. J. S. Sloan, T. H. Strong, and A. R. Brimblecombe, of the entomological staff, and throughout the work valuable co-operation was received from officers of the Stock and Dairy Branches.

Enormous numbers of grasshoppers were killed in the baiting campaign, and the reduction in numbers was accelerated by the incidence of natural enemies, the egg parasite, *Scelio fulgidus* Crawford being particularly helpful in this respect; indeed, in certain large egg beds in the Goondiwindi district hatching was almost completely inhibited by the work of this useful insect. Two species of Tachinid flies also operated at a later stage in the life cycle of the grasshopper and were helpful in control. The wasp, *Polistes schach* F. was recorded by Mr. T. H. Strong, as a useful predator in the Texas district, and the same officer observed a red mite exercising some beneficial influence in restricted areas.

The outbreak commenced to wane in January, and from then on the position materially improved and the closely settled Darling Downs areas escaped with little or no loss. It was at one time considered that these areas were seriously menaced and the expenditure of time and money involved in the application of the bait appears to have been fully justified, partly by the relief afforded in the infested pastoral districts and partly by the protection incidentally given to the closely settled agricultural areas south-west of Brisbane.

The plague grasshopper was not the only species involved in the outbreak for a survey of the north-western portion of the State by Mr. J. Harold Smith, Entomologist, showed that *Gastrimargus musicus* F. and *Austacris proxima proxima* Walk. had also been present in large numbers in the north-west and indeed grasshoppers had been abnormally and continuously abundant in that area during the past two years. In this connection it is interesting to note that evidence was also available in support of the belief that the plague grasshopper had been gradually breeding up along the New South Wales-Queensland border during the last three or four years and steadily working north and east therefrom.

Tobacco Grasshopper.

The appearance of the plague grasshopper in the Texas, Inglewood and Yelarbon districts naturally caused a very considerable amount of anxiety among the tobacco growers in these areas. However, no particular evidence of

interest in tobacco was displayed by this species and appreciable losses as a result of its presence were not observed by the entomologists handling the plague grasshopper outbreak.

It so happened, however, that another species, *Phaulacridium gemini* Sjost, the adults of which may possess either fully-developed wings or abbreviated wings, was responsible for serious damage on certain tobacco farms, particularly in the Riverton district. This species was reported by Mr. T. H. Strong, as breeding outside the tobacco fields and migrating thereto and destroying seedlings, the leaf being badly riddled in the later stages of growth. For a variety of reasons the ordinary baiting system, which is so successful in the case of the plague grasshopper, was ineffective against this species. Preliminary control experiments along somewhat different lines did, however, yield promising indications and it is hoped to follow up these should this pest reappear.

White Grubs and Grass Grubs.

The investigation of the white grub problem in paspalum paddocks on the Atherton Tableland has occupied a great deal of the time of Messrs. J. Harold Smith and D. O. Atherton, the two officers associated with the entomological field station in North Queensland. The work has followed the lines indicated in last year's annual report and much valuable information has been accumulated. Towards the end of the Departmental year the two officers concerned were therefore in a position to draw up a tentative scheme of comprehensive field experiments designed to shed further light on the amelioration of the position in the infested areas. The experiments are largely of an agricultural nature, hence before they are initiated it will be necessary to discuss and elaborate the tentative plan of the experiments with the Agricultural Branch and to obtain its co-operation as well as the assistance of the Agricultural Chemist's staff.

At the present moment an area of approximately 25,000 acres is infested in the Malanda district by *Lepidiota caudata* Blkb., and this species is the chief cause of the white grub trouble on the Tableland. The closely-allied species, *Lepidiota laevis* Arrow, is still confined to a few farms in the vicinity of Atherton and shows no tendency to spread.

Losses from the grass grub, *Oncopera mitocera* Turn., have been of little consequence during recent years and the area in the Millaa Millaa district, which was seriously infested a few years ago, is at present in excellent condition and displays no evidence of the presence of the caterpillars of this moth.

The progress of the colony of the giant American toad, *Bufo marinus*, which was recently introduced by the Bureau of Sugar Experiment Stations for the control of the white grub pest in the sugar cane districts, will be followed with interest. At a later date this useful species may become permanently established on the Atherton Tableland and, if it does so, it is sincerely hoped that it will assist in reducing the white grub and grass grub populations in that district. It is considered, however, that even if assistance is obtained by the introduction of additional natural enemies, such as the giant American toad, a change in agricultural practices is essential for complete success in control, at least in so far as the white grubs are concerned.

Leaf Miner and Stem Borer of Tobacco.

The investigation of the tobacco leaf miner, *Phthorimaea operculella* Zell, and the tobacco stem borer, *Phthorimaea heliopa* Low, was continued by Mr. D. O. Atherton, Assistant Entomologist, and the work has now been finalised except for the checking up of a few minor points during the coming season.

Large scale seed bed experiments were initiated at Mareeba to determine whether or not seed-bed infestation by these two pests could be controlled by spraying and dusting. The outcome of these experiments was a demonstration of the fact that the colloidal copper and the copper emulsion sprays employed for the control of blue mould of tobacco exercise a very beneficial influence in controlling seed-bed infestation by the leaf miner and the stem borer. It is therefore now considered that the use of one of the blue mould sprays, preferably the colloidal copper, will together with the regular application of an arsenate of lead dust, ensure a supply of tobacco seedlings reasonably free from leaf miner and stem borer infestation.

A comprehensive manuscript dealing with this investigation has been prepared by Mr. Atherton and it is hoped that it will be published at an early date.

Tobacco Seed Harvesting Ants.

The work on these pests was finalised during the year under review and a full report of the investigation has been prepared by Messrs. J. Harold Smith and D. O. Atherton and now awaits publication.

Corn Ear Worm.

As already mentioned, a new entomological field station has been opened at Rockhampton and it is intended that it should serve as a centre for entomological work in Central Queensland. The officer in charge is Mr. W. J. S. Sloan and naturally he will devote a large proportion of his time to the investigation of cotton pests. As a preliminary step in such an investigation he visited all the cotton-growing districts in the State during the past twelve months and made a survey of the entomological position therein.

The corn ear worm, *Heliothis obsoleta* F., is the outstanding entomological problem with which the cotton industry is faced and it has accordingly been decided that it will constitute Mr. Sloan's chief investigational project. Furthermore it has been decided that he should investigate its control on all its major host plants, i.e., cotton, tobacco, tomato, maize and lucerne. Certain measures of value in combating this pest are already available, but it is felt that the problem of control still merits very considerable attention. Mr. Sloan's investigation of this important pest has now commenced.

Green Vegetable Bug.

The green vegetable bug *Nezara viridula* L., which is a comparatively recent arrival in Australia, is now firmly established in Queensland, the Darling Downs, Stanthorpe, Texas, Lockyer Valley and Brisbane districts all

reporting severe infestation during last summer. The pest was then undoubtedly more destructive than it has ever been and it is steadily spreading to previously uninfested territory.

Spraying experiments for the control of this insect in tomatoes were carried out by Mr. Weddell and success in these preliminary tests was obtained with a modified resin-caustic soda-fish oil spray. No injurious effect was produced on the tomatoes and a reasonably good kill of the immature stages of the bug was obtained. Arrangements are being made for further experiments with this and other sprays during the early summer months of 1935.

Potato Tuber Moth.

During recent years certain institutions have been recommending a very high concentration of carbon bisulphide gas for the fumigation of potato tubers infested by the potato tuber moth, *Phthorimaea operculella* Zell, and for this and other reasons it was considered desirable to institute a series of fumigation experiments, using for this purpose a small fumigation chamber built for another investigation. The work is now well under way and the results obtained to date by Mr. Weddell, even during weather when the conditions were not ideal for carbon bisulphide fumigation, indicate that only a small fraction of the maximum dosage sometimes recommended overseas is necessary to give practically a 100 per cent. mortality under Queensland conditions.

Peanut Pests.

The peanut crop has generally and rightly been regarded as one of the healthiest in Queensland and it continues to enjoy that enviable reputation. Nevertheless it so happens that a certain amount of trouble recently developed in stored peanuts, although the position was by no means serious; adequate steps have now been taken to eliminate further trouble of this nature. This incident, however, directed attention to some of the newer fumigants which had not yet been tested in Queensland and led to the initiation of fumigation experiments with peanuts and other products. Here again the work is in the hands of Mr. Weddell, but it is as yet too early to indicate what results are likely to be obtained.

Grape Vine Mealy Bug.

The grape vine mealy bug, *Pseudococcus* sp., is a pest of local importance occurring only in the vicinity of Brisbane, but where it is present it constitutes a difficult major problem. The most serious aspect of this mealy bug infestation is the frequent occurrence of large numbers of the insect on the bunches of grapes, thus rendering a considerable proportion of the crop unmarketable. A number of field control experiments have been undertaken in the Myrtletown and Sunnybank districts and it is hoped that this work, which has been entrusted to Mr. Weddell, will indicate lines along which satisfactory control can be obtained.

Queensland Fruit Fly.

As usual the Queensland fruit fly, *Chaetodacus tryoni* Froggatt, featured largely in the programme of the Stanthorpe Entomological Field Station and Mr. Hubert Jarvis, the entomologist in charge of that station, carried out spraying experiments in connection with its control on four different orchards. The incidence of hail and certain other factors rendered the experiments less conclusive than was hoped would be the case, but in two of the orchards definite evidence of protection by certain sprays was obtained the nicotine sulphate—white oil mixture, which gave promising results in the preliminary experiments last season, again affording a considerable measure of protection. It gave better results than white oil alone and colloidal sulphur, but no definite recommendation can yet be made in favour of spraying for fruit fly control. Arrangements, however, are being made for a repetition of the work during the approaching season. It is hoped that the results of the 1934-35 season experiments will be published in the *Queensland Agricultural Journal* at an early date.

A new fruit fly lure was the subject of experiments in the Nambour and Gayndah districts and was responsible for very promising catches. Preliminary arrangements have been made for continuing this work in the Rockhampton, Nambour and Stanthorpe districts.

Citrus Root Bark Channeller.

The citrus root bark channeller, *Pseudomydaus citriperda* Tryon, received some attention from Mr. W. A. T. Summerville, the Assistant Entomologist in charge of the Nambour Entomological Field Station, but some obscure points still occur in the life history of this pest and until these are cleared up doubt will continue to exist as to when and how best to apply the known control measures.

Citrus Leaf-Eating Weevil.

The citrus leaf-eating weevil, *Eutinophaea bicristata* Lea, is a pest of considerably greater importance than is generally recognised, and Mr. Summerville has accordingly been giving it an increasing amount of attention since the completion of his work on the scale insects of citrus. It is therefore now featuring more prominently on his research programme than was previously the case.

Citrus Foliocellosis.

The problem of citrus foliocellosis has been allotted to Mr. Summerville, and he is now actively pursuing the investigational work entailed therein, much of which has of necessity to be carried out in the Gayndah district. It is, however, too early to report on this project and indeed this applies to much of Mr. Summerville's work during the last twelve months. The end of last departmental year witnessed the conclusion of a large programme of citrus pest investigations, while the year under review was devoted chiefly to elaborating experiments on a set of projects which had previously received minor attention.

A New Citrus Pest.

During the month of June the banana thrips, *Scirtothrips signipennis* Bagnall, was found breeding on citrus in a North Coast orchard, both oranges and mandarins being attacked. The skin of the oranges was considerably disfigured by actively feeding thrips in all stages of development, but the madarin infestation was not at all severe. This discovery was rather disturbing, and the position is being carefully watched.

Banana Thrips.

As in the previous year, Mr. N. E. H. Caldwell, Assistant Entomologist, conducted the banana thrips investigation, large scale experiments being laid down on four plantations at Cootharaba, Kin Kin and Calico Creek. The thrips infestation was comparatively light but useful results were obtained in the experimental work. These showed that weekly treatments with nicotine dusts gave very good results, while fortnightly treatments gave a good degree of control but the results were not so striking as in the case of the weekly applications. Derris dusts were included in this year's experiments and were found to give a degree of control comparable to that obtained with nicotine dusts.

The banana thrips infestation is much less acute than was the case a few years ago, the pest having suffered a definite but probably temporary decline in importance in the last two years. Nevertheless the results of Mr. Caldwell's experiments indicate that nicotine dusts or derris dusts may well meet the requirements even in the event of a severe and widespread thrips epidemic. That point, however, can be definitely decided only if and when such an epidemic occurs.

Occasional records of silvering of bananas were obtained from the South Coast district, but in no case was the incidence of any material consequence. The affected areas on which the insect has fed acquire a silvery appearance and the injury is generally attributed to the presence of *Thrips imaginis* Bagnall. A dusting programme for the control of the ordinary banana thrips would also doubtless keep this species in check.

Noogoora Burr Seed Fly.

As stated in last year's report some twenty thousand specimens of *Euaresta aequalis* Loew were liberated in various Noogoora burr infested districts in Queensland on behalf of the Council for Scientific and Industrial Research. No evidence of the establishment of these colonies has yet been obtained.

Pin Hole Borer of North Queensland Cabinet Woods.

Work on the pin-hole borer of North Queensland cabinet woods, *Crossotarsus grevilleae* Lea, was completed by Mr. J. Harold Smith in the 1934-35 season, and the results of this investigation carried out on behalf of the Forestry Sub-Department are now being published in the *Queensland Agricultural Journal*.

Forestry Pests.

An increasing amount of attention has been devoted to forestry pests in Southern Queensland, again on behalf of the Forestry Sub-Department, and this work has been allotted to Mr. A. R. Brimblecombe, Assistant to Entomologist. One of the main projects is the investigation of a white grub problem associated with coniferous plantations in Southern Queensland. This involves life history studies in Brisbane and control experiments in the field. A very considerable amount of attention is also being devoted to the powder post beetle, *Lyctus brunneus* Steph., and to the Queensland pine beetle, *Calymmaderus incusus* Lea. A pamphlet dealing with the latter pest was prepared by Mr. Brimblecombe and appeared in the November issue of the *Queensland Agricultural Journal*.

Other Investigations.

A large number of other pests are also under investigation at the various centres, most of those mentioned in the present report being merely a selection of the species receiving particular attention during the current year.

Bee-keeping.

The bee-keeping advisory and inspectorial work has once more been carried out by Mr. Henry Hacker, Entomologist, and a total of 208 apiaries have been inspected during the year under review. It is pleasant to be able to record the fact that the apiaries of Queensland still appear to be free from foulbrood. A considerable amount of Mr. Hacker's time was devoted to the preparation of a comprehensive advisory bulletin on beekeeping and this publication appeared towards the end of the departmental year.

Insect Collections.

The overhaul of the insect reference collections at Head Office was completed by Mr. Hacker, and small reference collections of duplicate material were prepared by him for the use of the entomologists at Nambour and Rockhampton.

Illustration Work.

Mr. I. W. Helmsing again carried out the duties of artist, and in the course of his work prepared a large number of colour sketches and black and white figures. A considerable number of new plates were completed for use in the new farmers' handbook, and a large series of coloured reproductions of exhibition cases for the use of the Agricultural College and High School at Gatton was also prepared.

Bird Collection.

The bird collection was maintained in good order by Mr. Helmsing and a number of accessions were made thereto.

Library.

The usual volume of valuable exchange accessions was received in the library which has been kept up to date in other respects; the cataloging proceeded in a satisfactory manner. A considerable number of books and other publications were obtained for the use of the new field station at Rockhampton.

Shows and Wireless Addresses.

Exhibits at shows and the delivery of wireless addresses again formed a feature in the publicity side of the Division's activities.

Advisory Work.

The advisory work is a further highly important aspect of the duties of the staff and is apparently steadily increasing in volume both at Head Office and at the various field stations. A special series of short, simply worded leaflets has been in course of preparation over the last few years to assist in the handling of this work and now covers a very considerable proportion of the advisory inquiries.

PUBLICATIONS.

The entomological and plant pathological chapters of the new farmers' handbook were completed during the year, and the following contributions by officers of the Division were published in the *Queensland Agricultural Journal*:—

(1) Queensland Citrus Scale Insects and Their Control. Parts III. and IV., by W. A. T. Summerville.
(2) Rice Weevil in Maize, by Robert Veitch.
(3) Spraying Experiments for the Control of Fruit Fly in the Stanthorpe District, by Hubert Jarvis.
(4) Grasshopper Control, by Robert Veitch.
(5) The Importance of Tobacco Mosaic, by L. F. Mandelson.
(6) Queensland Pine Beetle, by A. R. Brimblecombe.
(7) Queensland Fruit Fly Control, by Robert Veitch.
(8) Codling Moth Control by Non-Arsenical Sprays, by Hubert Jarvis.
(9) Pineapple Wilt Disease and Its Control, by H. K. Lewcock.
(10) Red Scale of Citrus, by W. A. T. Summerville.
(11) Top Rot of Pineapples and Its Control, by H. K. Lewcock.
(12) Root Knot Nematode and Its Control, by Robert Veitch.
(13) The Bronze Orange Bug, by W. A. T. Summerville.
(14) Diseases of the Banana, by J. H. Simmonds.
(15) Cabbage Pests and Their Control, by Robert Veitch.
(16) An Introduction to Beekeeping, by Henry Hacker.
(17) Prairie Grass Smut, by R. B. Morwood.
(18) Report of Cereal Smut Experiments, 1934, by R. B. Morwood.
(19) The Brown Vegetable Weevil, by Robert Veitch.
(20) The Pin Hole Borer of North Queensland Cabinet Woods, by J. Harold Smith.
(21) The Control of Rats and Mice, by Robert Veitch.
(22) A Novel Moth Lure, by Henry Hacker.

ROBERT VEITCH,
Chief Entomologist.

THE WORK OF THE PATHOLOGICAL BRANCH.

Mr. J. H. SIMMONDS, M.Sc., Plant Pathologist, reports as follows:—

The operations of the Pathological Branch have been of both an advisory and a research nature. As the advisory work is of a miscellaneous character, it will not be referred to here except for the mention that it is steadily increasing in volume. Progress can be reported on most of the research projects. This will be summarised under the name of the host plant concerned.

CEREALS.

Results of the field trials laid down by Mr. Morwood in 1934 in continuation of his experiments on the seed treatment of cereals are now available, and have been summarised in an article appearing in the April issue of the *Queensland Agricultural Journal*. The experiments were conducted with drill sown plots situated in two localities—namely, Roma and Nobby.

Bunt of Wheat (*Tilletia tritici* and *T. laevis*).—A comparison was made between fourteen different fungicides, including commercial and standard samples of copper carbonate, formalin, bluestone, and several mercury compounds. All treatments reduced the amount of bunt very consideraby. The commercial brands of copper carbonate were slightly inferior to the standard sample. Of the mercury dusts, some were slightly superior, others inferior. There appears to be no reason at present for departing from the present system of treating wheat seed with copper carbonate for the control of this disease.

Covered Smut of Barley (*Ustilago hordei*).—Three formalin treatments, Uspulun, and five mercury dusts were used in this experiment. All treatments greatly reduced the amount of disease, in some cases eliminating it entirely. Taking into account all considerations the treatments which can be recommended as being superior are the formalin sprinkle, and dusting with either Ceresan U.T. 1875, or Abavit B.

Smut of Oats (*Ustilago avena* and *U. Levis*).—Ten different treatments were tried in this case. Of these, formalin, sublimatoform, Abavit B, and Ceresan were definitely superior. As the use of sublimatoform offers no special advantages the other three seed treatments are recommended.

PRAIRIE GRASS.

Smut (*U. bromivora*).—This was the first occasion in which prairie grass (*Bromis unioloides*) had been included in this series of experiments. Six treatments were tried. Abavit B, Ceresan, and Formalin gave excellent control. Agrosan G proved somewhat inferior, while bluestone and Uspulun were quite unsatisfactory.

PEANUT.

To investigate methods of overcoming the poor stands commonly obtained in the peanut crop as a result of bad germination or loss of seedlings at emergence, Mr. Morwood laid down a peanut seed treatment plot at Kingaroy. Six seed treatments as well as hand shelled and hand planted seed were tried. The results were promising and suggest that the use of mercury dusts would be well justified by the increased stand.

TOBACCO.

Mr. Mandelson's visit to America early this year and the preliminary work attendant to this have considerably curtailed tobacco disease work during the past twelve months. A further spraying experiment for the control of blue mould (*Peronospora hyoscyami*) was laid down in the spring of last year. The main object was to ascertain the best strength and spreader to adopt when using home-made colloidal copper. The results showed that the original recommendations of colloidal copper—1 in 30 plus 0·5 per cent. potash soft soap as a spreader—was the most satisfactory of the sprays tried. Very encouraging reports have been received of the control given by both colloidal copper and copper emulsion in the field. The same results do not appear to be obtained in Southern States. This may be due to the slower development of the seedlings owing to colder growing conditions.

Potato.

Irish Blight (*Ph. infestans*).—Having previously demonstrated the advantage of spraying potatoes with Bordeaux mixture for the prevention of blight loss, Mr. Morwood enlarged his experiments during the last spring crop in order to determine the effectiveness of home-made Bordeaux at three different strengths and to compare this spray with a number of other sprays, proprietary Bordeaux mixture, and copper dusts. Bordeaux mixture of 4-4-40 strength proved as effective as when used at the rate of 6-4-40. Home-made colloidal copper, Buisol, six ready mixed Bordeaux powders, used at the equivalent rates of 4 lb. of bluestone to 40 gallons of water, and five copper dusts compared favourably with home-made Bordeaux. Two sulphur sprays, namely lime-sulphur and colloidal sulphur, gave no control of the disease.

Banana.

Little attention has been given to the leaf diseases of the banana during the past twelve months, the main work being in connection with transport rots. It is, however, interesting to note that the large leaf spot caused by *Cordana musæ*, which had previously been recorded only on rare occasions in Southern Queensland, has lately been found in greatly increased intensity, and in some plantations has been responsible for more damage than the common Cercospora spot.

A black tip disease of green fruit has associated with it a fungus apparently identical with *Helminthosporium torulosum*. This organism has been recorded from several other banana-growing countries, more particularly the West Indies. So far the disease has been of somewhat infrequent occurrence in Queensland.

Squirter (*N. sphærica*).—Investigations in connection with this disease being largely of a laboratory nature have made little progress on account of the disorganisation arising out of building alterations. Work on the classification of the pathogenic and non-pathogenic strains of Nigrospora is proceeding.

Black End.—Mr. Mitchell has devoted most of his attention to black end. By making isolations from infected fruit at regular intervals throughout the year and carrying out inoculation tests for pathogenicity he has been able to assess the relative importance of the various associated organisms. His results largely confirm Miss Hoette's findings for the Melbourne markets—namely, that *Gloeosporium musarum* is responsible for the greater part of the loss. Mr. Mitchell has also investigated the source of *Gloeosporium* inoculum in the plantation and carried out a number of experiments designed to find a suitable fungicidal treatment of the fruit. In this latter work it has not been possible to reduce the amount of black end beyond a certain point, and the reason for this failure is consequently being looked into.

Citrus.

Owing to the limited time available Mr. Mandelson was able to arrange for only one citrus spraying experiment last season. This was carried out at Howard, and was designed to test the efficiency of home-made colloidal copper as a control for brown spot of the Emperor mandarin, and to see if this spray was less conducive to increased scale infestation than was Bordeaux mixture. The results were definitely promising, and subject to confirmation it would appear that colloidal copper, one in thirteen, is likely to prove a useful substitute for Bordeaux mixture on citrus, inasmuch as this spray was effective in controlling disease and yet resulted in a much lighter scale population than when Bordeaux was used.

Pineapples.

The fact that Mr. Lewcock has been able to devote his whole time to this crop has materially assisted in the pineapple investigations.

Wilt.—Most of Mr. Lewcock's attention has been given to elaborating field experiments with the view to determining the best means of providing the soil conditions necessary to render the plant resistant to wilt. Considerable success has attended these experiments, and practical results are already being obtained in a commercial way. An article on pineapple wilt appeared in the January issue of the *Queensland Agricultural Journal*.

Brown Speck.—Dusting experiments for the control of brown speck were somewhat inconclusive owing to the low incidence of disease during the course of the experiments.

Black Heart.—Working on the assumption that black heart was related to abnormal transpiration, a number of field experiments were conducted with a view to possible control. It was found that by enclosing the fruit in paper bags the disease could be prevented, but the labour involved renders the practical application of this procedure impossible.

Papaw.

In the case of papaw diseases two plots were laid down to test the efficiency of various fungicides for the control of powdery mildew (*Sphærotheca* sp.), black spot (*Ascochyta caricæ*), and the ripe fruit rots. The results were quite definite as regards powdery mildew—sulphur and copper sprays and a sulphur-copper sulphate dust all effectively controlling the disease. However, it was found that the copper sprays, Bordeaux and colloidal copper, caused severe scorching of the young leaves, even at reduced strengths, and consequently the use of these sprays cannot be recommended. The control of black spot and other fruit rots was not so successful, and further information regarding these diseases will have to be obtained.

Deciduous Fruits.

Apple, Powdery Mildew.—The sprays giving most promise during the 1933-34 season were tried on a more extensive scale during last year. Unfortunately, as a result of a heavy hail storm the plot had to be abandoned.

Apple, Rosette.—No results are yet available from the soil applications made in the autumn of 1934.

Black Spot of the Plum.—The zinc-lime spray was again tried last season, using a more elaborate schedule, but no control of the disease was obtained.

Anthracnose of the Grape.—Strong Bordeaux mixture and lime sulphur were tried as alternatives to the sulphuric acid-iron sulphate swab for the control of this disease. In contrast to the preceding season, the incidence of the disease was very light and definite results could not be obtained.

Forest Pathology.

Fused Needle of Pinus spp.—Mr. Young has continued his investigations on this disease, and although the actual cause is not yet known interesting developments have taken place which may lead to a solution of the problem. In the meantime field observations on all aspects of the disease are being continued and an extensive plot embracing a number of soil treatments has been laid down. A progress report on this work will appear in the *September* issue of the *Queensland Agricultural Journal.*

Mycorrhiza.—Isolation and inoculation work has shown that *Boletus granulatus* is a mycorrhiza former in the case of a number of exotic pines grown in Queensland. Soil treatment plots are in progress at Yarraman with the object of finding a practical means of obtaining the optimum conditions for rapid spread of this mycorrhiza in seed-beds.

Diplodia dieback.—This disease has caused considerable damage in some districts. In order to check the spread all affected trees have been removed and destroyed. There appears to be two distinct species of *Diplodia* responsible for this attack. The host range of these two species is being determined by inoculation.

Root Rot of Hoop Pine (Araucaria cunninghamii) Seedlings.—A species of *Rhizoctonia* has been responsible for a considerable loss in nursery stock in the Brisbane Valley area. Preliminary recommendations involving sterilisation with Cheshunt mixture have been made, and the disease is being further investigated.

Bluestain of Hoop Pine.—A certain amount of loss occurs during the wet season on account of the degrading of first-class logs by the presence of bluestain. During last summer field experiments were carried out in co-operation with officers of the Forestry Sub-Department to test the efficacy of several sprays for controlling bluestain in the field. Lignasan gave very promising results, but it is doubtful whether spraying under Queensland conditions will prove economically practicable.

REPORT OF THE GOVERNMENT BOTANIST.

The work of the Branch is mainly advisory, and the inquiries submitted extended over a wide range of subjects relative to plant life. The availability of the service of the Branch for giving reports on any specimens submitted is now generally known. This service is being widely availed of by farmers and pastoralists generally, and the number of specimens is very much on the increase. A large number of specimens was received during the year from the Department of Public Instruction, particularly from secretaries of school project clubs and from teachers desirous of having reports on specimens suitable for nature study classes. Where the replies to inquiries submitted were deemed to be of more than individual interest they have been utilised by the Editor of the departmental publications for the pages of the "Queensland Agricultural Journal." These replies are now regarded as a feature of the Journal, and extracts have been quoted freely in other journals, both in Australia and abroad, and a number of subscribers have indicated their appreciation.

FIELD WORK.

Owing to a very large number of specimens on hand from previous collecting trips, no extensive general botanical collecting was done during the year. The most extensive single collecting tour was by the junior assistant to Noondoo, Southern Maranoa district, in December, when a large collection of grasses and forage plants, including many duplicates for exchange purposes, was made. During October, at the height of the wildflower season, an extensive range of specimens was obtained in the Lamington National Park area by myself. Visits to the Darling Downs, made by myself on other matters, gave opportunities for general botanising.

Visits were made by the Assistant Government Botanist to Roma, Chinchilla, Peachester, Montville, and to the Currumbin and Tallebudgera Valleys for the purpose of inspecting properties where losses of stock, supposedly from eating poisonous plants, had occurred. A similar visit was made by the junior assistant to Mount Gravatt. Notes on the individual plants observed will be found referred to under "Poisonous Plants."

I paid two visits in early September, and one in May, to Bybera, the property of Dr. E. Hirschfeld, between Inglewood and Millmerran. These visits followed ones made the previous year for the purpose of keeping under observation and report the experiments being carried out by Dr. Hirschfeld on native and introduced grasses, which have received some prominence in the Press.

A brief résumé on some observations made on the last visits to Bybera is offered herewith:—

Mitchell Grass.—Only a comparatively small area, about 1½ acres, is devoted in the chief experimental plot to Mitchell grasses, and at the time of my last visit they had been so heavily punished by cattle that the natural grasses (native chloris grasses, brigalow grasses, love grasses, etc.) were very much on the increase. The Mitchell grass clumps, in spite of being heavily eaten down, have all increased in girth, due to the formation of numerous buds or shoots by each individual clump. What the life of this Mitchell grass is going to be I do not know, but am inclined to think that unless this small paddock is closed, and the Mitchell grass given a chance to recuperate, it will gradually be eaten out and the grasses natural to the district take its place. This is quite interesting, because so many people claim that Mitchell grass is not particularly palatable, and that stock only eat it when forced on to it in the absence of other feed. On this property the stock have shown a decided preference for it above the other grasses. This may, of course, be due to the fact that there is only a comparatively little of it, and the animals like a change. In western areas, where Mitchell grass predominates, the reverse, of course, may hold.

Flinders Grasses.—These, at the time of my visit, had nearly all been eaten off, but judging from the number of pieces lying on the ground in the old Flinders grass area I should say it had regenerated well, in spite of the fact that the greater quantity of seed had been taken off for sowing elsewhere on the property.

Woolly Finger Grass (Digitaria eriantha).—Roots of this grass were obtained last May from the State Farm, Bungeworgorai, and were immediately planted out. This was not a particularly good time for planting out the grass, as it is essentially a summer growth. It has been planted in sandy country and protected from stock and rabbits. Naturally, not having been fed off, it has not run to the extent it would had it been fed or cut. Some of the runners, however, were measured and found to extend to 5 ft. 3 in., with fresh plants about every 4-6 inches along the runner. A large number of the runners, however, had died off at the tips and were very short, due, of course, to the dry weather experienced during the late summer of 1935. Some roots were planted on the heavier soil, and these have not grown anything like as well as those in the sandy country. This is something very much in favour of the grass, for the native grasses are superior to it in growth and palatability for the heavier soils. At present in Queensland this grass has only been grown from roots.

A small plot of several strains of woolly finger grass from seed sent to Dr. Hirschfeld by Dr. Pole Evans, of the Department of Agriculture, Pretoria, South Africa, was sown and the seed germinated well. The seed from this has been collected by the manager of the property, Mr. R. S. Hirschfeld, and if he sows it the coming season the results should be looked forward to with interest. One great drawback to woolly finger grass in this country at the present time is that it has to be planted from roots only.

When available, it is highly desirable that very exhaustive tests with woolly finger grass seeds of different strains, and in different parts of Queensland, should be made.

I think it is desirable for the Department to keep in touch with Dr. Hirschfeld's experiments.

In my last report I referred to a questionnaire that had been circularised among stock inspectors, land commissioners, and some others, asking about Mitchell grass, Flinders grass, and other native grasses in their respective districts. As I mentioned before, the response to the circular was most gratifying, and specimens are still being received. The specimens have all been determined, and the information has been tabulated and published through the "Agricultural Journal.' It is intended to reprint it, along with another report, in booklet form. Following this report, a recommendation has been made to the Department that certain experiments should be carried out in Western Queensland relative to native grasses, particularly Mitchell grass. In spite of the fact that our main wealth comes from Mitchell grass, and to a lesser extent other native grasses, we have little exact information about it, particularly as to its length of life and effects of different degrees of stocking, very diverse views being held by different graziers of experience—these views generally being expressed without any ulterior motive, and in all sincerity. It is certainly highly desirable that more exact information, through experimental plots and observations on pastoral properties, should be available.

Weed Destruction.

A visit was made in June to the Maranoa District for the purpose of making observations in the field on the weir vine (*Ipomœa calobra*). This plant has enormous stores of water and reserve food supplies in large underground tubers, which it develops here and there along the roots some distance from the parent crown. It is very abundant in some parts of the Maranoa district, and the desire that experiments should be conducted on its eradication was much stressed by graziers to whom I have spoken. The plant produces a trouble amongst sheep similar to that produced by Darling pea, or indigo, and some other plants which cause a locomotive disturbance. Suggestions for experiments have been made, and it is hoped that it will be possible to start these early this year.

Poisonous Plants.

Numerous specimens were received during the year from pastoralists and dairy farmers in different parts of the State, as suspected to be poisonous to stock. As in previous years, records of the more important are made herewith as a small contribution towards our knowledge of this important subject.

Family *Portulacaceæ*.

Portulaca oleracea (Pig Weed).—Received from Mr. J. Garvey, Sandhurst Park, Fernlees, on 19th March, 1935, with the following remarks:—"Under separate cover I am forwarding you three fairly thick stalks of the ordinary pig weed. These were given to me by Mr. C. J. Hock, of Wyalla, Wurba Siding, who states that some of his sheep died through eating this stalky stuff lately. The sheep swell up considerably before dying. I have heard of travelling sheep that were starving dying through over-eating of this plant if they have access to water after eating it. I would be glad to have any information you may have on this plant, particularly if it contains a poisonous element at any time during its growth. As a rule stock rarely touch it when there is abundance of feed, but in a time like the present where the grass is dry they may partake of it owing to its juicy stalk."

The common Pig Weed is often accused of poisoning sheep and cattle in Western Queensland, but in all cases I think death is due to hoven, as it seems to be in this one.

Family *Sapindaceæ*.

Heterodendron oleaefolium (Boonaree).—Received from Mackinlay, North-western Queensland, with a report:—"It seems to be somewhat poisonous to sheep. We have cut it and found one or two dead near it on more than one occasion, though hundreds must have eaten it. It usually has an abundant foliage which sheep eat readily, resulting deaths being too obvious to be caused by anything else."

This plant is known definitely to be fairly strongly cyanophoric.

Family *Leguminoseæ*.

Zornia diphylla.—Received from a correspondent at St. Lawrence, with a report:—"Herewith please find sample of a plant which seems to have come up in my horse paddock since the last storms, which I have a suspicion has caused a very virulent sickness amongst my horses. Five head have been very bad (one died). The symptoms are: Quite well in the morning, about midday almost lose the use of their limbs, staggering about like a drunken man, nerves all strung up, like strychnine poison, their eyes blinking, the sight impaired, no wish to lie down, heaving in the flanks. The treatment I gave them was a dose of lime water, with nitre, and Epsom salts, and I bled them freely, and after twenty-four hours they recovered (those that I thus treated). The one that died was too far gone when found. The animals recovered are languid and weary for some days after recovery, and then seem to be alright. Of course, they have fallen away a bit. The enclosed is the only foreign weed that I can discover where the horses feed, and seems to be nibbled by them."

This plant is a very common herb in North Queensland. It belongs to a group of legumes allied to the tick trefoils, or desmodiums. It is not known to possess

any harmful properties, and, generally speaking, is looked on as quite a useful fodder.

Family *Cucurbitaceæ.*

Cucumis trigonus (paddymelon) and *Cucumis myriocarpus* (gooseberry melon).—Stock Inspector Allan reported to me in conversation that he was positive from observations he had made that these *Cucumis,* particularly *C. trigonus,* were responsible for blindness in horses in the Birdsville district and South-western Queensland generally. *C. trigonus* is by far the commoner of the two. So far as I know, no feeding tests have been carried out with *C. trigonus,* the common paddymelon of Western Queensland, and if a plant of this family is responsible for the trouble it seems to me that probably this species of *Cucumis* is the one to be tried. I have received specimens of seeds from the vomit of a child who had been made violently ill from them but, on the other hand, some Western pastoralists have informed me that they have used it as a vegetable.

Family *Compositæ.*

Centaurea melitensis (cockspur thistle or saucy jack).—Notes received from Mr. A. J. Lewington, Hodgson, 16th December, 1934, with the report:—"Yesterday we had the misfortune of losing 56 lambs and 15 ewes out of a travelling mob of 4,700 ewes and lambs when near Amby. The sheep ate some of the enclosed weed, bloated, and died within 175 yards. Many others were saved by the drover in charge, who both bled and "stuck" the sheep to allow the gases to escape. (I don't think the bleeding had any effect.) I am sure we have isolated the weed responsible for the trouble, although it is generally looked upon as "harmless sheep feed."

Craspedia chrysantha (yellow top).—Received from R. Cameron, Willgunia Station, Winton, with the following remarks:—"This herbage is called yellow top by all pastoralists, and grows everywhere I have been out from the coast. In 1903 there was nothing else growing down the Cooper channels. When the flood waters went there was no rain. Then I had 45,000 sheep on it and about 80 head of horses; they all did well. Since that time a great many drovers say that it makes their horses go blind. They say they get better. I do not believe that this herbage is the cause of the trouble. I think it is probably a small herb they do not see because there is not much of it. If it was this plant in 1903, then all our horses would have gone blind, because there was nothing else for them to eat from August to the end of September."

Minuria integerrima.—Received from Messrs. Fennell Brothers, "Noella," Charleville, with the following remarks:—"Thought it looks to be alright, nothing will eat it. It grew here last year in the middle of the drought. I have seen cattle bite it and then discard it. Possibly it is a poison and should be destroyed."

Verbesina encelioides (wild sunflower, American dog weed).—Note received from Mr. S. S. Bassett, Bundilla Station, via Roma, 25th February, 1935:—"The sunflower is growing on mountainous country which has been burnt, and I have had some losses with sheep and think the deaths may have been caused through them eating the sunflower."

This American weed is now very freely established in parts of Queensland, and, though very common, this was the first occasion on which I had received specimens with a report that it was poisonous to stock, though Dr. Seddon, of the Glenfield Research Station, informed me in conversation that he had found it definitely responsible for certain cases of pneumonia in sheep. This information was sent to Mr. Bassett, and he replied later—

"When I got your letter I thought that the wild sunflower was not the cause of poisoning my sheep, so I said if it is not the sunflower it must be the creepers running up the dead trees, so we burnt all the creepers and let all the sheep back, among the wild sunflowers, and went to town for two days. When we came back we found them dead all over the place, 43 in all in two days, fat sheep. We were turning them away from the sunflower patch every night, and did not lose any, and we are turning them away now and not losing any. So you see the wild sunflower is deadly poison for sheep. My neighbours tell me they have plenty of sunflowers, and the sheep eat them, but I don't think they eat enough to kill them. I am positive the sunflower is killing my sheep and is deadly poison. I lose sheep every year about this time of the year, and did not know what is was until now. I supose I have lost 400 or 500 by this cause. I will be able to cope with it now."

Family *Apocynaceæ.*

Acocanthera (*Toxicophloea*) *spectabilis.*—Some time ago a correspondent forwarded specimens of the fruit of this shrub, and I referred to them in the "Queensland Agricultural Journal" as poisonous. On publication of this note, a correspondent from the South wrote me that the shrub in question was growing in the Melbourne Botanic Gardens, and that Mr. Cronin, the one-time Director of the Gardens, had informed him that he and his family freely ate of the fruits, although they were supposed to be poisonous. In late September, 1934, I received specimens from Mr. E. Jarvis, with the following note:—"When I visited the Botanic Gardens last Wednesday Mrs. Jarvis noticed a bush carrying bunches of white flowers, the perfume from which was so sweet that she touched with her face the leaves and

blossoms whilst smelling it. About ten minutes after, while we were sitting on the lawn having a light refreshment, she noticed a taste resembling quinine, and a sore feeling at the back of the tongue; apparently due to touching the food with fingers which had handled the flowers in question. Parts of the face had touched the leaves and flowers while smelling the blossoms, resulting in smarting of the eyes and skin. These symptoms had not ceased the following morning, the feeling of poison at the back of the tongue being also noticeable on Thursday."

Ochrosia elliptica.—This is a very common tree on the beaches of North Queensland, and was referred to in the "Queensland Agricultural Journal." Soon afterwards I received a note from Mrs. E. Hugonin, Shannon Vale, West Point, Magnetic Island, as follows:—"I note with interest your remarks re *Ochrosia* in the August Journal. I remember some years ago holidaying north on a launch, calling at the Brook Islands and seeing those same trees. Being fresh from South (Sydney), I was very interested in all flora and fauna, but was amazed at the fright exhibited by one of the launch boys (aborigine) when I told him they were 'nice plums,' and I had eaten some. This was only a joke, as I wasn't keen on trying anything out before I was sure of its being edible or otherwise. However, the aborigine said they were 'bad,' 'close up die,' &c. Later years (about eight years ago), while living at Arcadia—another bay of this island—a neighbour had a young cockatoo, just beginning to talk and take notice. One of the boys—son or grandson, I forget—brought home one of these seeds, and it was given to the cockatoo. This was late afternoon, and next morning the owner found the bird dead under the perch. It had eaten some of the fruit, how much I don't know, but this it was that killed it."

Family *Asclepiadaceæ*.

Asclepias curassavica (milky cotton or wallflower cotton).—Received from J. McDonald, Cawarral, with the report that he had lost some cattle mysteriously, and was wondering if this plant was the cause. A farm visited by Mr. J. L. Bowman, District Inspector of Stock, and Mr. S. L. Everist, Assistant to Botanist, was found infested in part with this weed. Losses had occurred, and the symptoms, as far as could be judged, agreed with those of *Asclepias* poisoning.

Gomphocarpus fruticosus (balloon cotton).—Received from a farmer at Woodcot, Boyne Valley Line, with the note that he had lost cattle at different times, and put the blame on to this plant.

Family *Solanaceæ*.

Cestrum Parqui.—Mr. A. Hossack, Inspector of Dairies, Laidley, reported on 28th June, 1935:—"I have to advise forwarding under separate cover six specimens—five bush plants, one water plant—and your opinion is sought as to which (if any) are causing poisoning in dairy cattle. Two animals died about a fortnight ago, and a neighbour also lost one or two animals. One cow is sick and two heifers are sick at present."

A town dairy, where losses of valuable cows had occurred, was visited by the Assistant Government Botanist, Mr. W. D. Francis, who found the paddocks infested with this shrub.

Duboisia myoporoides.—This very poisonous plant is generally left untouched by stock, but specimens received from Cooroy, where losses among cattle had been experienced, showed evident signs of having been eaten.

Solanum Seaforthianum (deadly nightshade).—This vine, a native of America, has now overrun much country in coastal Queensland. Mr. A. Wakefield, Mackay, sent me specimens of it, and later wrote as follows:—"This district has many vines, both wild, on the beaches, &c., and in private gardens. As attendant at a local zoo a while back my experience was this (the vine was growing over aviaries and enclosures):—

(1) An adult Angora rabbit and a half-grown ditto both died whilst in apparent good health. On opening up, found berries and leaves of *Solanum Seaforthianum*.

(2) A golden pheasant in another aviary in prime condition died suddenly. Found berries of *S. Seaforthianum* in crop.

(3) A half-grown kangaroo had been eating the seedling plants of *S. Seaforthianum* growing in earth floor of aviary, and died.

Family *Verbenaceæ*.

Duranta repens (Duranta).—Received from Mr. E. J. Shelton, Senior Instructor in Pig Raising, with the report:—"Specimen herewith of a shrub for identification. It is a common shrub used as a hedge plant. It is desired to know if there is any record of the berries proving to be poisonous to pigs. A line of these shrubs is growing around a piggery at Strathpine . . . who had six porker pigs die on the 17th October; there are suspicious circumstances, and it is thought the trouble may be due to poisoning, although so few berries were noticeable on the shrubs one could scarcely suspect these berries as being even a possible cause."

Family *Labiatæ*.

Mentha satureioides (Native Pennyroyal).—Received from Boowoogum, South Burnett district, through Government Veterinary Surgeon Maunder, with the report that it was locally regarded as the cause of

serious losses in calves through abortion. The plant was abundant in patches, and showed signs of being eaten.

Salvia coccinea.—Received from Mr. Ross Nott, Government Veterinary Surgeon, Rockhampton, with the following report:—"Herewith specimens of two weeds growing on creek bank near Biloela. Numerous cases of a more or less sporadic abortion have been occurring in dairy cattle pastured on this creek, and I would like to know whether these plants are known to have caused anything of similar nature previously, particularly the one with red flowers."

Also received from Rathdowney, where it was suspected of causing losses among dairy cattle. Full particulars were not received.

Salvia reflexa (Wild mint).—Received from Mr. A. I. M. Gillespie, Orion Downs, Springsure, with the following comprehensive report:—"I am by this mail posting to your Department a tin containing the grass and weeds contained in the paunch of a sheep apparently poisoned on the Springsure-Rolleston road. The poison appears to have been picked up on the road and water reserve, about 5 miles to 7 miles from Springsure, and possibly also about 9 miles from Springsure.

"We untrucked 2,185 young sheep from Russleigh, near Isisford, sent here for drought relief. These starving sheep arrived very hollow, but without loss in the trucks, and continued on the road to Orion without loss until the afternoon of the second day travelling, when two sheep died after being watered about 5 miles from Springsure, at the Council's bore troughing. That night, 8 miles from Springsure, 52 sheep died from poison, apparently in much pain, and the following night, when camped at the Staircase flat, about 13 miles from Springsure, 161 died in a similar manner. A few also died during the day. These sheep reached an Orion sheep paddock in four days' travelling for 17 miles from Springsure, and for the next twenty-four hours losses on a lesser scale continued up to the present time. These sheep travelled from Russleigh to Emmet, 15 being poisoned before reaching Emmet. After untrucking at 9 a.m. on the 21st instant, they watered at the trucking reserve and travelled 2½ miles, next day they watered at the 5-mile bore troughs and travelled to a camp at the 8-mile; the following day to the Staircase flat 13 miles from Springsure, and on the 24th instant, Sunday, were let go in an Orion paddock, that night further losses occurred. From their appearance, the losses are now practically over.

"When opened, the sheep are poor, but not badly drought-stricken, the paunches are moderately full, and the flesh and skin dark coloured, and any thin lining of fat round the paunch very dark in colour. In some instances there is a blood-coloured froth from the mouth after death. No loss occurred after untrucking when the sheep first filled themselves moderately with water and feed for the first twenty-six hours after untrucking. From twenty-six to thirty hours after being on feed 2 sheep died; and within forty to forty-five hours on feed 52 sheep died; within the next twenty-four hours 180 sheep died, and losses continued for some hours after entering the sheep paddock and being watered there.

"The grass on the road was well fed down by travelling stock without loss of stock that were in good strong condition. The grass had been grown by storm rains in November and December, 1934, and in January, 1935. The last rain fell in storms up to about the 20th February. Since that time the feed has dried with hot weather. I understand that some "wild mint" is showing in places, and that some caustic or euphobia weed was showing after the rains in January and early in February. Latterly this has dried off considerably.

"On the same day 1,300 fat wethers from Orion passed these hoggets, and were held up for a time on the 5-mile water, waiting for a drink at the troughs while the hoggets were watering. Although both mobs passed over the same road, none of the fat wethers were poisoned. At various intervals other mobs of sheep had passed along without loss from poison, and horses and cattle regularly grazed along the road with no loss. None of the sheep that died were really full in appearance, as the feed was too dry to enable the hoggets to fill themselves as is so often the case in good seasons. This is the first heavy loss from poison I have known on that road.

"I would be very glad if you could tell from the amount of the contents of the paunch sent to you as to what the poison was, and the probable plant that caused the loss. Wild mint is growing in places, and has only, I think, been known in any quantity for about two years in this district. This is the first possible loss that I know of that might be attributed to its action, but I did not think the quantity sufficient to occasion such a loss. That losses should continue from the second night of travelling to the fourth night, when the sheep were let go in their paddock, is unusual in this district, as it was not anticipated from previous experience that any poison would be distributed over a long length of the road. Nor does it seem likely that sheep would die of poison three nights after eating the poison. The losses while travelling during the day were comparatively light to those in the yards at night."

Family *Phytolaccaceæ*.

Phytolacca octandra (Ink weed).—Specimens received from Mrs. A. Fitzpatrick, Booie, Kingaroy, through the local stock

inspector, who reported that Mrs. Fitzpatrick was very emphatic in her idea that the ink weed was the cause of the death of two cows. In reply, the stock inspector was informed that the plant was probably poisonous, but was generally left entirely untouched by stock. To this he replied that in the Yarraman district and surrounding scrubs there were hundreds of acres of ink weed in the burnt scrub, and he had never heard of any losses of stock there.

Family *Lauraceæ.*

Endiandra sp. (*E. pubens* or *E. virens*).—Forwarded from Mooloolah by Mr. H. Freeman with the report that the fruits were eaten by stock and were suspected of bringing about the death of some of them.

Family *Araceæ.*

Typhonium Brownii.—Received from a farm in the Wondai district with the report that one cow had died and several others showed symptoms of poisoning.

Family *Iridaceæ.*

Iris sp.—The Stock Inspector, Kingaroy, reported on 20th June, 1935:—"I have the honour to advise having forwarded to-day by post a sample bulb of a species of garden lily. This bulb is from the garden of J. and R. Williams of Crawford Siding, Kingaroy, and they are suspecting this plant of being of a poisonous nature to stock."

Family *Palmæ.*

Arecastrum romanzoffianum.—Received from Dairy Inspector Clayton, with a report that the palm was growing on the property of Mr. Foote, who noticed the calves eating the unripe nuts, evidently being very fond of them. Messrs. Foote Brothers reported losing three calves, while others had been sick. The first symptoms of the complaint are described as severe scouring.

Family *Agaricaceæ.*

Lepiota dolicaulos (White Toadstool).—Received through Veterinary Surgeon C. R. Mulhearn from Mrs. M. Milne, Coolum Creek, with a report:—"You will probably remember an old cow which I told you had been on the farm for three years and has kept its condition throughout that period. This cow greedily eats a certain fungus growth whenever it is available, and is the only cow I have ever seen eating this fungus. Is it possible that there may be some curative property in this fungus?"

This fungus has been accused several times in Southern Queensland and Northern New South Wales of causing losses to stock. It belongs to a wholesome genus (*Lepiota*), and the above note may be of some interest.

Botanic Museum.

Additions to the Botanic Museum have not been very numerous. Specimens of dried fruits, barks, and woods have been added from time to time. Some enlargements of Queensland vegetation have been added to replace older pictures.

Lectures.

Lectures were delivered during the year as follows:—"Plants Poisonous to Livestock," two radio lectures, broadcast from 4QG, and to Stock Inspectors' School, Animal Health Station; "Noxious Weeds, Their Eradication and Control," Health Inspectors' Conference; "Classification of Queensland Orchids," two lectures, to Orchid Society and to Queensland Naturalists' Club; "Poisonous and Milk-Tainting Weeds and Grasses," two lectures, to Pig Farmers' and Dairymen's School, Queensland Agricultural High School and College, Gatton, and Dairy Leaders' Course, Brisbane; "Flora of Moreton Bay," Royal Society of Queensland; "Flora of Carnarvon Range," National Parks Association of Queensland; "Aquatic Plants," Aquarium and Terrarium Society; "Winter Legumes," broadcast from 4QG; "Notes on Inland Pastures," by S. L. Everist, broadcast from 4QG.

Herbarium.

Following the practice in some other institutions, we are making the Herbarium a compendium of information on native plants, filing away in it notes, drawings, &c., in addition to specimens proper. Exchanges of botanical material have been continued with the Botanic Gardens, Singapore; Botanic Gardens, Buitenzorg, Dutch East Indies; Royal Botanic Gardens, Kew, England; British Museum of Natural History, London; University of California; Botanic Gardens, New York; Herbarium of L. H. Bailey, New York; Botanic Gardens and Museum, Berlin; and Dr. O. Degener, Honolulu. A large quantity of critical material, especially among the grasses, has been forwarded to the Royal Botanic Gardens, Kew, for determination, and for this thanks are especially due to Sir Arthur W. Hill and botanists at Kew for assistance with difficult material. Some specimens have been sent to the Botanic Gardens and Museum, Berlin, for examination by specialists, and I have to thank Dr. L. Diels, the Director, and some of his assistants, for much help received. Numerous specimens have been sent to the Arnold Arboretum, Boston, U.S.A., in continuation of the botanical exploration of Queensland and the Western Pacific accomplished on their behalf.

Publications.

The following publications have been issued in the course of the year:—

C. T. White: Nut Grass (*Cyperus rotundus*), "Queensland Agricultural Journal," September, 1934; Sour Grass or Yellow Grass (*Paspalum conjugatum*), "Queensland Agricultural Journal," November, 1934; The Common Bracken (*Pteridium aquilinum*), "Queensland Agricultural Journal," February, 1935; Botany of Mount Edwards, "Queensland Natura-

list," August, 1934; The Structure and Classification of Queensland Orchids, "Queensland Naturalist," March, 1935; Two Trees of the Genus *Dysoxylum* in North Queensland, "North Queensland Naturalist," Vol. III., pp. 34-36; A Few Notes on the Genus *Ptychosperma* in Queensland, Proc. Roy. Soc. Qld., Vol. XLVI., No. 8; Salvia reflexa, Proc. Roy. Soc. Qld., Vol. XLVI., Page XI.

C. T. White and *K. S. McIntosh:* Lantana (*Lantana Camara*) and Poison Peach (*Trema aspera*); Their Effects on Stock, "Queensland Agricultural Journal," April, 1935.

W. D. Francis: Inland Pastures, Part I.—The Mitchell Grasses of the Western District, "Queensland Agricultural Journal," March, 1935.

S. L. Everist: Inland Pastures, Part II.—Response during 1934 Season of Mitchell and Other Grasses in Western and Central Queensland, compiled from Reports received, "Queensland Agricultural Journal," April, 1935; Grasses of Mount Edwards, "Queensland Naturalist," August, 1934; Chloris Grasses in Queensland, Part I., "Queensland Agricultural Journal," May, 1935.

In addition to the foregoing, I have submitted to the Royal Society of Queensland a paper on "Contributions to the Queensland Flora," containing descriptions of a number of previously unknown plants from North Queensland, and records of a considerable number of additions to the Queensland Flora. Mr. C. E. Hubbard has now definitely commenced the publication of the results of his work on Australian grasses in the Bulletin of Miscellaneous Information, Royal Botanic Gardens, Kew, England, and two papers on *Gramineæ australienses* have appeared during the year. The continuation of the publication of the results of Mr. Hubbard's investigations on Australian grasses is much looked forward to, as it will enable us to name more satisfactorily many of the specimens of grasses now received for identification. The results are based largely on Mr. Hubbard's work in the field and in the Queensland Herbarium during 1929-30.

C. T. WHITE,
Government Botanist.

REPORT OF THE AGRICULTURAL CHEMIST.

During the year there was a great increase in the number of samples received in the laboratory for analysis, and the table below gives the number of the various materials analysed.

	1932–33.	1933–34.	1934–35.
Butters	708	833	551
Buttermilks	..	68	737
Cheese	118	116	184
Dipping fluids	356	407	342
Egg pulps	..	3	..
Fertilizers	75	104	78
Fruits, fresh	104	181	184
Fruits, canned, jams, and preserves	15	8	12
Limestones, lime, &c.	18	27	18
Milks and other milk products	50	17	26
Pest destroyers	139	258	104
Stock foods	41	125	79
Soils and subsoils	176	131	164
Soil moisture determinations	2,496	2,496	2,400
Soils for nitrate, pH, carbon, and mechanical analyses	686	1,055	2,249
Grasses, plants, seeds, &c.	426	284	159
Salts and stock licks	71	52	39
Waters	167	199	156
Wheats	41	37	216
Viscera and toxicological specimens	177	199	175
Samples for Arsenic in Wool Commission	..	..	319
Tobacco	62	19	21
Nuts, Australian, Tung, &c.	10	11	..
Sandalwoods	..	3	1
Miscellaneous	110	88	109
Grasses and plants for hydrocyanic acid	..	175	62
Totals	6,046	6,797	8,385

GLASSWARE TESTED, &c.

	Received.	Approved.	Condemned.	Broken.	Per cent. Condemned.
Cream bottles	2,796	2,791	1	4	0·04
Milk bottles	1,369	1,361	3	5	0·22
Pipettes	818	769	45	4	5·50
Thermometers	822	699	116	7	14·11
Totals	5,805	5,620	165	20	2·84

Two hundred and thirty-five pints of iodine solution were prepared for the testing of cattle-dipping fluids, and 516 pints of N/10 alkali and 21 pints of phenolphthalein prepared for testing milk acidity.

STAFF.

It is with very deep regret that the death, which occurred in June, of Mr. G. R. Patten, A.A.C.I., Senior Analyst, is reported. The Department has lost a valuable officer, and his fellow officers a valued friend.

During most of the past year Mr. L. A. Burgess and Mr. E. B. Rice were engaged upon work in connection with the establishment of the new dairy research laboratory, while Mr. I. R. Bick was transferred in September from the Dairy Branch to this laboratory. The following officers of the Department were transferred to this Branch:—Mr. L. S. Smith, from the Entomological Branch, in March; Mr. F. Keogh, from Mackay Sugar Experiment Station, in May; Miss T. Warner, from Cane Prices Board, in June.

VISCERA.

One hundred and twenty-five samples of animal viscera and stomach contents were analysed during the year, of which 23 samples contained arsenic; cyanide and strychnine were absent, but 17 of the samples gave alkaloidal reaction.

SOILS.

The chemical analyses of the soil samples submitted are given in Table I., and the mechanical analyses and physical properties in Table II. The soils marked "T" are those upon which tobacco crops were grown, and those marked "P" refer to pineapple soils and "F" to forestry.

There were 164 soil samples forwarded by farmers for the usual agricultural analyses.

The soil work done in collaboration with officers of other branches of the Department in connection with their investigations into the variations in crop growth has very greatly increased. This is shown by the fact that the nitrate content of 1,361 soils was determined, as compared with such determination in 558 soils last year; and the carbon content of 117 soils was determined, as compared with this determination in 68 soils last year. The determination of different factors of the 2,249 soils forwarded by departmental officers is detailed below:—

Soil nitrates	1,361
Soil carbon	117
Soil pH (pineapple soils)	72
Soil pH (forestry)	209
Soil pH (tobacco)	150
Soil pH (others)	302
Soil, partial analysis	38
	2,249

GRASSES, SHRUBS, &c.

Analyses of the grass samples received are given in Table III. The number of grass samples forwarded for analysis was less than last year. Some were small samples of grass roughage, insufficient for complete analysis, which stock were forced to eat in districts in which the season was abnormally dry. These samples were forwarded, mostly, for the purpose of ascertaining what concentrates, supplementary feeds, and stock licks were required in addition to the roughage to keep the stock alive. It is of interest to note that it was reported that stock grazing on "sensitive plant" (*Mimosa pudica*) together with a little "wild lucerne" (*Stylosanthes mucronata*) were maintained in excellent condition. The leaves of the "sensitive plant" have a high protein content.

FRUITS.

Besides other fruits, some samples of pineapples, taken from fertilizer experimental plots, have been received in which potassium sulphate is used in the fertilizer of some plots, and potassium muriate in other plots to ascertain if any difference occurs in the storage quality of

the fruit. This matter will be reported upon by the Fruit Branch, but during these experiments samples are being received for analysis to ascertain if any difference in the composition of the fruit is effected by the continued use of the potash fertilizers mentioned.

Cereals.

Wheat samples numbering 152 were received from the Queensland State Wheat Board. In these samples there were 22 different varieties, grown on different soils and in different districts. The specific protein quality of the different varieties of wheats was determined on these samples, but until further samples have been obtained from future harvests grown under possibly varying climatic conditions it would not be advisable to make definite statements regarding the protein quality of the several wheats. The analysis of these wheats was published in the "Queensland Agricultural Journal."

Arsenic in Wool Commission.

The number of samples received from the Commission and analysed are detailed below. Three progress reports have been submitted to the Commission, and the analyses of further samples are being conducted.

	Samples.
Wool	121
Hair	101
Urine	84
Air	4
Water	4
Sheepskins	4
Soil	1
	319

Sawfly Investigation.

In January experiments in connection with the sawfly trouble were initiated on Mr. T. Penhallurick's property at Merivale. These experiments were designed to ascertain if phosphorus or protein deficiency might be the cause of what must be termed the depraved habit of stock consuming the sawfly larvæ. In connection with the possibility of phosphorus deficiency, visits were made by an officer of this laboratory each month to determine the inorganic phosphorus content of the blood of animals. Up to about April there was fair grass feed available in the experimental paddock, but unfortunately, the experiments had to be postponed as no sawfly appeared; the grass crop failed also, through lack of rain and the severity of the winter. It is intended to continue these experiments.

As Chairman of the Veterinary Medicines Board, Experimentation Committee, and Pig Nutrition Committee, the following is reported:—

The Veterinary Medicines Board appointed under "*The Verterinary Medicines Act of* 1933" held 19 meetings in the course of the year; 503 medicines were registered and 101 medicines are pending registration.

The experimentation committee, consisting of officers of the Department, was formed under instructions from the Minister to ensure closer collaboration between officers of the Department and local producers' associations, so that any particular problem requiring investigation in any district might, if deemed advisable, receive attention.

In the course of the year 18 meetings of the committee were held, and, approximately, 50 experiments have been inaugurated in various coastal districts up to Mackay and in the districts of Chinchilla, Tara, Cottonvale, and Boonah. Experiments are, therefore, conducted on different soil types under varying climatic conditions. They cover crop varietal trials, fertilizer trials, and green manuring, suitable winter grasses and fodders, soil erosion control and drainage.

Details of the pig nutrition experiments are contained in the report from the Animal Health Station.

E. H. GURNEY, Agricultural Chemist.

Table I.—ANALYSES OF QUEENSLAND SOILS.

Laboratory No.	Locality.	Description of Soils.	TOTAL ELEMENTS IN THE SOIL, CALCULATED ON SOIL DRIED AT 100° C.									Available Plant Food. Soluble in 1 per cent. Citric Acid.				Total Elements. Lb. per Acre, 12″ Deep.				Available Plant Food, Soluble in 1 per cent. Citric Acid. Lb. per Acre, 12″ Deep.			SOIL ACIDITY.			Remarks.
							Soluble in Hydrochloric Acid. Sp. Gr. 1·115.																	PH.			
			Humus.	Combined Water and other Organic Matter	Chlorine.	Nitrogen.	Phosphoric Acid.	Lime.	Magnesia.	Potash.	Total Insoluble Matter.	Phosphoric Acid.	Lime.	Magnesia.	Potash.	Nitrogen.	Phosphoric Acid.	Lime.	Potash.	Phosphoric Acid.	Lime.	Potash.	Water Suspension 1 : 2	$\frac{N}{1}$ KCl Suspension 1 : 2	Truog Test.	
			%	%	%	%	%	%	%	%	%	%	%	%	%											
	COOK—																								
3785	Dimbulah .. T	..	1·24	2·10	·004	·073	·03	·09	·08	·20	96·4	·0016	·0694	·0113	·0139	3,672	1,559	4,376	10,010	80	3,491	694	6·12	..	..	Fertilizer Experiment Plots.
3786	Ditto .. T	..	·72	2·31	·003	·045	·02	·07	·12	·19	95·8	·0007	·0672	·0130	·0093	1,701	831	2,533	7,142	26	2,540	352	6·35	..	..	
3787	Ditto .. T	..	·64	·92	·003	·036	·01	·15	·08	·03	92·9	·0039	·0650	·0038	·0052	1,664	647	6,470	1,156	180	3,000	240	6·73	..	..	
3788	Ditto .. T	lt. y. sd. ..	·65	·59	·003	·028	·02	·07	·06	·04	96·6	·0040	·0510	·0143	·0058	1,360	730	3,400	1,996	194	2,482	282	6·28	..	..	
3789	Koak, *via* Mareeba T	lt. y. sd. ..	1·04	2·68	·004	·062	·01	·04	·04	·03	94·0	·0015	·0375	·0018	·0059	2,428	548	1,548	1,214	59	1,468	231	6·91	..	..	
3790	Paddy's Green, Mareeba T	r. s. cl. ..	·88	2·25	·003	·067	·03	·07	·06	·04	92·0	·0035	·0688	·0001	·0038	2,568	1,035	2,763	1,572	134	3,638	145	6·68	..	..	
3791	Chewko, *via* Mareeba T	r. br. sd. ..	·67	1·05	·006	·062	·02	·07	·05	·07	95·8	·0054	·0624	·0015	·0067	2,563	826	2,826	2,893	223	2,579	277	6·70	..	..	
3792	Emerald Creek T	r. sd. cl. ..	·80	2·12	·004	·056	·02	·13	·02	·07	93·0	·0060	·0495	·0026	·0031	2,345	837	5,440	2,932	251	2,073	130	7·11	..	..	
3793	Dimbulah .. T	br. sd. ..	·47	·97	·002	·073	·01	·04	·03	·04	96·6	·0030	·0476	·0025	·0064	3,633	497	1,962	1,988	194	2,369	318	6·63	..	..	
3794	Ditto .. T	lt. r. s. ..	·64	1·54	·005	·067	·02	·12	·02	·05	95·1	·0124	·0364	·0034	·0008	2,878	643	5,156	2,148	532	1,564	378	7·04	..	..	
3797	Queensland Forest Service, Wongabel Nursery, Atherton F	lt. br. l. ..	1·42	8·97	·002	·197	·31	1·44	·29	·13	67·4	·0151	·7523	·1015	·0069	6,303	9,953	46,116	4,313	484	24,114	222	8·08	7·93	Nil	
3798	Ditto .. F	lt. br. l. ..	1·19	7·23	·002	·162	·20	·43	·17	·17	69·2	·0040	·2724	·0449	·0167	5,208	6,303	13,923	5,308	129	8,732	534	7·59	7·35	Nil	
3799	Ditto .. F	lt. br. cl. l.	·80	7·21	·002	·122	·14	·26	·17	·20	69·9	·0012	·1944	·0467	·0158	3,915	4,645	8,294	6,303	40	6,260	508	7·30	6·74	V. sl.	
3875	Freshwater, Cairns P	..	1·30	6·70	..	·132	·13	·18	·21	·07	..	·0023	·0750	·0490	·0027	..	..	..	..	..	..	..	..	..	..	(1)
3876	Double Gold Road, Cairns P	..	1·49	5·80	..	·131	·04	·09	·08	·53	..	·0066	·0470	·0270	·0068	..	..	..	..	..	..	..	..	..	..	(2)
3877	Yungaburra.. P	..	2·60	12·48	..	·317	·19	·19	·19	·28	..	·0050	·1630	·0996	·0351	..	..	..	..	..	..	..	..	..	..	(3)
	NORTH KENNEDY—																									
3867	Horseshoe Bay, Magnetic Island P	..	·76	3·22	..	·074	·03	·29	·22	·17	..	·0068	·1697	·0781	·0166	..	..	..	..	..	..	..	..	..	..	(4)
3868	Ditto .. P	..	1·16	4·62	..	·119	·06	·66	·17	·20	..	·0180	·2852	·1122	·0378	..	..	..	..	..	..	..	..	..	..	(5)
3869	Ditto .. P	..	·71	3·01	..	·057	·02	·18	·09	·18	..	·0028	·0812	·0392	·0088	..	..	..	..	..	..	..	..	..	..	(6)
3870	Ditto .. P	..	·40	2·54	..	·045	·02	·14	·08	·10	..	·0057	·0623	·0563	·0102	..	..	..	..	..	..	..	..	..	..	(7)
3871	Ditto .. P	..	1·08	4·14	..	·091	·02	·17	·08	·07	..	·0045	·0906	·0310	·0114	..	..	..	..	..	..	..	..	..	..	(8)
3872	Ditto .. P	..	1·28	2·96	..	·074	·04	·18	·20	·08	..	·0098	·1060	·0800	·0085	..	..	..	..	..	..	..	..	..	..	(9)
3873	Nellie Bay, Magnetic Island P	..	·65	2·65	..	·045	·04	·12	·10	·06	..	·0083	·0640	·0660	·0770	..	..	..	..	..	..	..	..	..	..	(10)
3874	Ditto .. P	..	1·25	4·58	..	·114	·08	·51	·09	·11	..	·0248	·3650	·0110	·0170	..	..	..	..	..	..	..	..	..	..	(11)
3878	Merinda, *via* Bowen P	..	1·71	5·12	..	·120	·17	2·04	1·47	·37	..	·0287	·1834	·0043	·0033	..	..	..	..	..	..	..	..	..	..	(12)
3879	Ditto .. P	..	1·76	5·86	..	·161	·19	2·05	·87	·24	..	·0394	·0978	·0078	·0016	..	..	..	..	..	..	..	..	..	..	(13)
3880	Delta, Bowen P	..	1·63	5·08	..	·103	·14	1·73	1·07	·32	..	·0333	·0993	·0083	·0122	..	..	..	..	..	..	..	..	..	..	(14)
3881	Ditto .. P	..	1·96	5·53	..	·163	·13	2·05	·89	·23	..	·0374	·1234	·0094	·0077	..	..	..	..	..	..	..	..	..	..	(15)
3882	Nerimbera, *via* Bowen P	..	5·05	15·02	..	·409	·25	1·57	·52	·23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	(16)

Pineapple Soils (marked P) { Carbon (C):—(1) ·52, (2) 2·09, (3) 2·78, (4) 1·11, (5) 1·26, (6) 1·05, (7) 1·56, (8) ·82, (9) ·82, (10) ·42, (11) 1·29, (12) 1·32, (13) 1·50, (14) 1·29, (15) 1·29, (16) 4·53, (17) 2·39, (18) 1·53.
Replacable Potash (K) as m.e.:—(1) ·023, (2) ·436, (3) 1·408, (4) ·553, (5) ·114, (6) ·343, (7) ·517, (8) ·522, (9) ·365, (10) ·328, (11) ·586, (12) ·200, (13) ·600, (14) ·473, (15) ·720, (16) ——, (17) ·551, (18) ——.

	BURKE—																								
3866	Nelia	gr. cl. ..	·31	3·67	·005	·035	·01	·61	·50	·17	84·12	·0007	·1830	·0535	·0091	1,193	351	20,346	5,612	25	6,150	305	8·06	6·69	Nil	
3911	Watten, *via* Hughenden	gr. cl. ..	·80	8·64	·010	·131	·07	2·03	1·50	·66	69·06	·0088	·7614	·0735	·0326	4,346	2,422	67,340	21,890	292	25,260	1,081	7·93	..	Nil	
	SOUTH KENNEDY—																								
3803	St. Helens, Carlisle..	lt. br. cl. ..	1·32	13·88	·008	·320	·31	·36	·62	·14	64·50	·0090	·1349	·0309	·0135	9,654	9,054	10,565	3,924	263	3,922	392	5·91	4·83	V. sl.	Por. 129
3804	Ditto	gr. br. cl. ..	·69	3·39	·007	·211	·28	·14	·36	·14	81·60	·0068	·0731	·0279	·0168	7,355	8,811	4,568	4,568	219	2,336	538	5·68	4·84	Sl. Med.	Por. 134
	LEICHHARDT—																								
3842	Codenwarve, *via* Emerald	gr. l. ..	3·17	7·70	·020	·213	·15	1·04	·70	·64	73·70	·0224	·3182	·0369	·0413	6,995	4,492	31,447	19,572	680	9,649	1,251	7·57	7·17	V. sl.	
3843	Ditto	gr. l. ..	2·34	4·81	·013	·146	·13	·86	·55	·60	80·66	·0358	·3563	·0741	·0221	4,911	4,560	29,115	20,346	1,207	12,021	747	7·70	7·17	V. sl.	Sheep Feeding Experiment.
3844	Ditto	lt. gr. br. s.	·50	·07	·003	·017	·02	·06	·03	·02	98·26	·0021	·0214	·0049	·0061	864	1,017	3,051	1,017	107	1,083	310	7·63	7·02	V. sl.	
3845	Ditto	gr. l. ..	1·58	5·95	·006	·136	·06	2·15	·67	·30	78·74	·0016	·2942	·0335	·0079	4,735	2,203	75,250	10,646	55	10,277	275	8·16	7·02	Nil	
3846	Ditto	lt. br. s. l...	·66	2·07	·01	·05	·04	·21	·33	·39	88·31	·0023	·0658	·0277	·0066	2,189	1,751	9,194	16,636	101	2,820	285	6·56	5·32	Sl.	
	PORT CURTIS																								
3834	Uxbridge, Flinders..	gr. s. s. ..	1·15	1·33	·005	·108	·01	·01	·01	·01	97·20	·0011	·0256	·0059	·0017	4,382	405	339	331	45	1,042	70	6·31	5·93	V. sl.	
3835	Ditto	lt. br. s. s.	1·77	2·67	·006	·191	·02	·17	·20	·01	91·61	·0013	·0606	·0022	·0019	7,532	828	6,704	236	51	2,389	74	6·56	6·23	V. sl.	
3836	Ditto	r. s. s. ..	2·31	2·98	·010	·175	·03	·10	·10	·05	91·22	·0006	·0525	·0473	·0027	6,350	806	3,553	1,776	21	1,693	95	6·45	6·31	V. sl.	
3849	Rockhampton, Livingstone	d. gr. cl. l.	2·47	11·20	·004	·260	·05	1·21	1·39	·03	65·66	·0016	·1421	·1524	·0035	7,400	1,536	34,415	922	46	4,044	98	6·18	5·62	Sl.	
3850	Ditto	lt. gr. cl. ..	1·33	3·66	·003	·114	·04	·30	·02	·18	88·85	·0021	·0756	·0350	·0035	4,020	1,436	10,552	6,460	72	2,677	122	5·93	5·17	Med.	
3851	Ditto	d. br. cl. l.	1·85	8·71	·005	·162	·06	·42	·04	·04	58·50	·0008	·0868	·1041	·0041	4,358	1,730	11,100	1,153	23	2,340	110	6·88	..	Med.	
3852	Ditto	br. cl. l. ..	2·91	11·91	·002	·316	·23	·88	·02	·08	58·64	·0372	·2870	·0552	·0225	8,716	6,456	24,210	2,306	1,026	7,926	622	6·43	6·00	Sl.	
3853	Ditto	h. gr. cl. ..	·70	11·30	·024	·122	·08	·27	·03	·44	61·12	·0024	·0703	·0824	·0075	3,960	2,475	8,908	14,140	78	2,276	244	6·75	5·84	Sl.	
3854	Ditto	h. d. gr. cl.	1·59	15·38	·025	·413	·10	·76	·03	·22	59·32	·0033	·1882	·1907	·0091	10,912	2,619	19,960	5,820	87	4,969	242	6·77	6·03	Sl.	
3855	Ditto	gr. cl. l. ..	3·31	12·21	·011	·351	·07	2·84	1·71	·39	62·36	·0032	·2611	·1047	·0041	10,051	2,132	81,325	11,270	91	7,472	119	6·72	5·87	V. sl.	
3883	Tauby, near Yeppoon P	..	1·89	9·10	..	·169	·20	·31	·32	·30	..	·0048	·1409	·0077	·0077	..	..	..	..	..	..	..	..	..	..	(17) Mn_3O_4 = 1·818
3884	Gracemere, Livingstone P	..	·82	4·42	..	·052	·12	·44	·25	·06	..	·0015	·1024	·0011	·0026	..	..	..	..	..	..	..	..	..	..	(18)
	BURNETT—																								
3766	Monto	gr. cl. l. ..	3·90	8·21	·002	·377	·19	1·38	·65	·27	64·06	·0110	·4664	·0748	·0097	11,135	5,680	40,692	7,886	325	13,777	287	7·23	6·27	Nil	0″–6″
..	(Subsoil of No. 3766)	gr. br. cl. l.	2·42	5·46	·002	·199	·13	1·04	·72	·22	63·74	·0026	·3075	·0303	·0050	6,590	4,274	34,552	7,124	85	10,172	164	7·37	5·96	Nil	6″–12″
3767	Monto	gr. cl. l. ..	3·26	10·21	·001	·316	·14	1·59	·73	·32	62·36	·0055	·5868	·0530	·0087	9,496	4,242	47,640	9,463	166	17,646	261	7·53	6·46	Nil	0″–6″ Cotton
..	(Subsoil of No. 3767)	lt. gr. cl. l.	1·67	9·23	·001	·175	·09	2·24	·97	·27	62·16	·0005	·3084	·0384	·0072	5,463	2,698	69,800	8,430	17	9,631	226	7·29	6·21	Nil	6″–12″
3768	Monto	gr. cl. l. ..	4·60	7·31	·001	·374	·14	1·58	·69	·38	65·31	·0127	·5426	·0452	·0128	10,042	3,818	42,290	10,278	341	14,553	344	7·57	5·97	Nil	0″–6″
..	(Subsoil of No. 3768)	gr. cl. l. ..	3·39	6·67	·001	·310	·13	1·44	·75	·33	67·08	·0085	·4664	·0368	·0138	9,085	3,785	42,270	9,778	250	13,690	404	7·01	6·18	Nil	6″–12″
3827	Byee, *via* Murgon ..	gr. cl. ..	·65	10·30	·003	·115	·14	·76	1·26	·40	60·65	·0031	·1518	·1137	·0077	3,574	4,384	23,600	12,476	98	4,721	239	7·03	5·82	..	
3891	Queensland Forest Service, parish of Grongah, county of McKenzie F	gr. l. ..	1·50	6·21	·003	·168	·08	·43	·60	·39	78·38	·0021	·1159	·0458	·0117	5,418	2,676	14,048	12,710	67	3,746	378	5·80	5·31	Sl.	
3892	Ditto .. F	gr. br. l. ..	·98	2·49	·003	·085	·04	·35	·18	·12	90·62	·0023	·0285	·0207	·0034	3,129	1,490	12,666	4,470	86	1,043	123	5·27	4·27	Str.	
3893	Ditto .. F	gr. l. ..	2·04	7·02	·003	·199	·23	·55	·62	·41	77·67	·0232	·1639	·0588	·0083	6,097	7,059	17,010	12,514	712	5,032	253	5·81	5·35	Sl.	

Table I.—ANALYSES OF QUEENSLAND SOILS—*continued.*

Laboratory No.	Locality.	Description of Soils.	TOTAL ELEMENTS IN THE SOIL, CALCULATED ON SOIL DRIED AT 100° C.									Available Plant Food, Soluble in 1 per cent. Citric Acid.				Total Elements, Lb. per Acre, 12″ Deep				Available Plant Food, Soluble in 1 per cent. Citric Acid. Lb. per Acre, 12″ Deep.			SOIL ACIDITY.			Remarks.
			Humus.	Combined Water and other Organic Matter.	Chlorine.	Nitrogen.	Soluble in Hydrochloric Acid, Sp. Gr. 1·115. Phosphoric Acid.	Lime.	Magnesia.	Potash.	Total Insoluble Matter.	Phosphoric Acid.	Lime.	Magnesia.	Potash.	Nitrogen.	Phosphoric Acid	Lime.	Potash.	Phosphoric Acid.	Lime.	Potash.	Pᴎ. Water Suspension 1:2	Pᴎ. $\frac{N}{1}$KCl. Suspension 1:2	Truog Test.	
			%	%	%	%	%	%	%	%	%	%	%	%	%											
	BURNETT—*continued.*																									
3771	Brooklands, Fitzroy	gr. l. ..	2·61	5·51	·003	·176	·12	1·75	·87	·45	72·40	·0040	·2665	·0492	·0058	5,374	3,650	53,410	13,600	123	8,118	176	6·13	5·24	Sl.	Pasture Improvement
3772	Ditto	gr. l. ..	2·74	5·56	·002	·187	·03	1·69	·87	·58	69·94	·0041	·3140	·0475	·0108	6,009	1,036	54,220	18,650	131	10,093	349	6·27	5·27	Sl.	
3773	Goodger, Fitzroy ..	gr. cl. ..	1·36	11·61	·011	·266	·07	4·05	1·41	·05	53·03	·0066	·3390	·1023	·0030	5,787	1,827	103,860	1,218	171	8,699	76	7·48	6·53	Nil	
3774	Ditto	lt. ch. cl. l.	2·05	12·26	·009	·310	·15	·97	·86	·02	44·55	·0074	·3149	·0926	·0028	8,851	4,278	27,639	658	211	8,992	79	7·53	6·56	Nil	
3811	Greenview, Wondai	lt. ch. l. ..	2·87	12·86	·003	·397	·18	·45	·19	·15	42·33	·0047	·3150	·0959	·0444	10,848	4,916	12,291	3,995	129	8,604	1,214	8·16	7·55	V. sl.	Por. 1–2
3812	Ditto	d. gr. cl. ..	2·91	13·67	·003	·305	·06	1·55	1·71	·12	53·48	·0015	·3416	·1323	·0087	7,826	1,455	39,860	3,200	38	8,224	224	6·99	6·09	V. sl.	Por. 8
3813	Wheatlands, Wondai	lt. gr. l. ..	1·50	6·89	·003	·148	·22	1·11	1·14	·50	71·96	·0266	·1787	·0964	·0105	4,454	6,681	33,409	15,131	802	5,377	315	6·22	5·78	Sl.	Sub. 22–23A
3814	Ditto	r. l. ..	2·06	14·29	·003	·175	·09	·12	·08	·02	41·42	·0041	·0461	·0154	·0102	4,568	2,327	3,200	582	108	1,204	268	4·99	4·14	Str.	Por. 32
3815	Ditto	r. br. s. s...	·87	2·55	·002	·069	·07	·25	·19	·09	88·55	·0045	·1398	·0269	·0170	2,532	2,646	9,071	3,402	166	5,164	627	8·40	7·99	V. sl.	Por. 42
3816	Ditto	lt. gr. br. f. s.s.	1·21	1·19	·002	·045	·03	·11	·11	·03	90·92	·0008	·0366	·0279	·0030	1,946	1,297	4,756	1,297	35	1,574	130	6·07	5·23	Sl.	Por. 315v
3817	Ditto ..	gr. cl. ..	2·11	11·24	..	·162	·04	2·91	1·41	·05	57·58	·0009	·5442	·1650	·0028	4,804	1,316	86,210	1,645	26	16,121	82	8·24	7·29	Nil	Por. 315v
3818	Ditto	d. gr. l. ..	4·72	10·16	·029	·450	·06	2·44	·75	·17	72·06	·0036	·4192	·0688	·0118	12,047	1,697	65,328	4,525	96	12,036	317	7·73	7·35	Nil	Por. 336v
3819	Ditto	lt. br. l. ..	3·40	9·86	·006	·379	·17	·98	·56	·13	64·88	·0069	·4269	·1079	·0148	11,328	5,134	29,200	3,850	205	12,739	443	7·99	7·58	Nil	Por. 340v
3820	Greenview, Wondai	d. gr. l. ..	4·34	15·16	·003	·538	·21	5·65	·96	·15	44·80	·0114	·5132	·0301	·0057	12,980	5,090	136,310	3,677	274	12,388	139	8·05	6·93	Nil	Por. 417v
3821	Ditto	ch. l. ..	3·61	11·42	·003	·253	·11	·67	·78	·02	50·45	·0011	·2073	·1107	·0103	6,700	2,991	17,649	598	30	5,495	272	7·01	5·75	Sl.	Por. 420v
	WIDE BAY—																									
3828	Queensland Forest Service, Lennox F	..	2·20	13·31	..	·181	..	..	..	..	..	·0006	·0920	·0148	·0019	4,188	..	..	..	14	2,300	47	6·30	..	..	(1)
3829	Ditto .. F	..	1·78	·998	..	·135	..	..	..	..	..	·0003	·0860	·0422	·0013	3,645	..	..	..	9	2,340	36	6·21	..	..	S. 9/231 (2) Expt. 84 Imbil (3)
3830	Ditto .. F	..	2·00	12·05	..	·172	..	..	..	..	..	·0001	·1010	·0520	·0038	4,483	..	..	..	3	2,630	99	6·33	..	..	
3831	Ditto .. F	..	1·23	10·28	..	·163	..	..	..	..	..	·0002	·0771	·0031	·0036	4,407	..	..	..	6	2,052	96	6·40	..	..	(4)

Carbon as CO_2—(1) ·33, (2) ·03, (3) ·10, (4) ·13, (5) ·24, (6) ·28, (7) ·13, (8) ·19.

Forestry Soils (Marked F)—
Total Carbon :—(1) 2·81, (2) 2·36, (3) 2·34, (4) 2·31, (5) 2·50, (6) 3·94, (7) 3·43, (8) 3·32.
Organic Matter—(1) 4·46, (2) 4·19, (3) 4·03, (4) 3·92, (5) 4·06, (6) 6·60, (7) 5·94, (8) 5·64.
Soluble in 1 per cent. Citric Acid—Fe_2O_3—(1) ·1320, (2) ·1615, (3) ·2990, (4) ·1359, (5) ·1184, (6) ·1476, (7) ·088, (8) ·0742.
Mn_3O_4—(1) 1·535, (2) ·112, (3) ·516, (4) ·199, (5) ·113, (6) ·193, (7) ·117, (8) ·084.

3858	Wamuran .. P	..	..	11·37	..	·068	·03	·09	..	·01	..	·0039	·0120	..	·0037	..	..	..	..	..	..	..	4·58	..	..	(19)
3859	Ditto .. P	..	..	14·07	..	·025	·03	·09	..	·02	..	·0050	·0190	..	·0042	..	..	..	..	..	..	..	4·65	..	..	(20)
3860	Ditto .. P	..	..	13·26	..	·092	·02	·08	..	·01	..	·0020	·0151	..	·0036	..	..	..	..	..	..	..	5·14	..	..	(21)
3861	Ditto .. P	..	..	8·82	..	·057	·03	·07	..	·01	..	·0012	·0240	..	·0042	..	..	..	..	..	..	..	5·16	..	..	(22)

	MARANOA—																										
3837	Ardno, Roma ..	gr. bl. cl. ..	1·26	8·31	·002	·084	·04	3·28	·16	·31	63·01	·0010	·3517	·0227	·0240	2,573	1,316	99,650	9,542	29	10,685	757	8·47	7·70	Nil	Pors. 17, 19
3838	Ditto	br. cl. l. ..	1·08	6·79	·002	·158	·15	2·53	·14	·42	66·43	·0016	·3601	·0360	·0289	5,502	5,101	88,160	14,572	55	12,562	1,009	8·38	7·47	Nil	Pors. 17, 19
3856	Noondoo, Belmore ..	lt. gr. cl. l.	·69	5·28	·016	·053	·04	·65	·89	·42	74·51	·0009	·1969	·0931	·0087	1,781	1,425	22,088	14,250	32	6,644	292	8·75	7·49	Nil	Pors. 10–11
..	(Subsoil of No. 3856)	lt. gr. cl. l.	·76	6·48	·059	·037	·07	2·25	·78	·44	75·06	·0037	·5454	·1212	·0101	1,165	2,398	71,264	14,047	116	17,300	322	8·25	7·66	Nil	
3857	Noondoo, Belmore ..	lt. br. l. ..	·88	3·44	·022	·064	·06	·75	·71	·44	79·10	·0098	·2870	·1128	·0090	2,293	2,219	26,628	15,532	348	10,210	322	8·51	7·37	Nil	Por. 12
..	(Subsoil of No. 3857)	lt. br. cl. l.	·68	5·04	·064	·036	·05	1·43	·96	·49	72·48	·0068	·2505	·1072	·0034	1,239	1,822	49,566	17,126	237	8,672	117	8·59	7·86	Nil	
3864	Narooma, Mungallala	br. cl. l. ..	1·23	9·34	·002	·173	·16	·76	·10	·48	69·50	·0139	·2557	·0316	·0406	5,286	4,895	23,168	14,685	424	7,821	1,243	8·27	7·75	Nil	
3865	Ditto	lt. br. s. l...	·76	3·12	·011	·063	·11	·26	·02	·21	86·81	·0130	·1252	·0918	·0293	2,276	4,038	9,545	7,710	470	4,523	1,057	8·17	7·81	Nil	
3896	Noondoo, Belmore ..	gr. cl. ..	·59	5·86	·066	·048	·03	·68	·79	·55	72·86	·0017	·1533	·0391	·0059	1,554	1,036	22,100	17,960	55	4,970	190	7·40	5·97	Nil	
..	(Subsoil of No. 3896)	gr. cl. ..	·71	5·91	·189	·024	·04	1·14	·93	·54	70·08	·0048	·4043	·0548	·0198	..	..	..	..	..	..	..	7·65	7·08	Nil	
3897	Noondoo, Belmore ..	gr. cl. ..	·57	6·51	·027	·048	·04	·75	·92	·51	73·21	·0084	·1763	·0357	·0117	1,615	1,436	25,127	17,230	280	5,968	391	8·15	7·01	Nil	
..	(Subsoil of No. 3897)	gr. cl. ..	·44	6·92	·210	·042	·06	·89	1·08	·58	69·24	·0068	·2033	·1017	·0200	..	..	..	..	..	..	..	7·33	6·85	Nil	
3886	Merivale Station, Injune	gr. s. l. ..	1·65	5·77	·005	·154	·05	·35	·19	·24	84·64	·0022	·1410	·0501	·0111	..	1,604	10,780	7,541	71	4,428	350	6·50	..	Nil	
3887	Ditto	br. gr. s. l.	1·26	3·60	·003	·085	·04	·25	·41	·20	88·26	·0025	·0891	·0313	·0048	..	1,490	9,128	7,451	93	3,278	175	6·68	5·87	Sl.	
	DARLING DOWNS—																										
3862	Canning Downs, Warwick	lt. gr. s. ..	·65	·83	·002	·039	·02	·09	·04	·01	96·48	·0011	·0322	·0086	·0058	1,729	886	3,990	443	49	1,414	257	6·65	6·26	V. sl.	Experimentation Committee
3863	Ditto	lt. gr. s. ..	·80	1·36	·002	·050	·02	·08	·03	·02	95·57	·0010	·0328	·0149	·0098	2,162	865	3,460	865	43	1,405	419	5·90	5·21	Sl.	
3769	Oakey	r. br. cl. l.	1·10	5·58	·003	·115	·09	·29	·46	·28	75·25	·0011	·1181	·0730	·0128	4,355	3,499	10,888	10,500	43	4,464	482	6·75	5·64	V. sl.	
3770	Ditto	br. s. s. ..	·50	1·76	·002	·045	·09	·17	·21	·14	90·40	·0012	·0791	·0298	·0057	1,640	3,279	6,194	5,101	44	2,857	208	7·58	6·31	Nil	
3885	Toowoomba ..	bl. cl. l. ..	3·32	13·58	·008	·237	·12	1·14	·41	·26	55·98	·0066	·2550	·0612	·0072	7,173	3,620	34,550	7,700	210	7,700	217	6·53	5·50	Sl.	
	MORETON—																										
3759	Wynnum	ch. l. ..	1·85	12·34	·003	·194	·06	·30	·27	·02	53·98	·0022	·1101	·0330	·0039	5,208	1,550	8,060	620	59	2,951	105	4·80	..	Med. str.	
..	(Subsoil of No. 3759)	lt. ch. l. ..	..	11·85	·004	·133	·04	·24	·27	·03	53·40	..	..	..	..	3,722	1,262	6,624	828	..	..	..	5·09	..	Med. str.	
3760	Aratula, Churchill ..	rd. br. l. ..	1·42	8·60	·004	·187	·09	·29	·14	·09	67·74	·0004	·1226	·0284	·0189	6,133	3,084	9,594	3,084	14	4,019	620	5·43	..	Sl.	
3761	Caboolture	gr. l. ..	2·48	8·08	·013	·325	·19	2·36	1·10	·27	69·26	·0154	·1942	·1185	·0178	9,280	5,530	67,300	7,682	439	5,540	507	5·67	..	V. sl.	
3762	Springbrook.. ..	lt. br. s. s.	·39	1·51	·003	·036	·06	·16	·23	·08	93·23	·0060	·0492	·0129	·0126	1,378	2,431	6,078	3,242	231	1,904	486	5·67	..	V. sl.	
3763	Ditto	gr. br. s. l.	·59	2·39	·003	·047	·08	·21	·30	·18	90·93	·0043	·0672	·0276	·0060	1,693	3,024	7,560	6,426	155	2,434	219	5·89	..	V. sl.	
3764	Benowra, *via* Southport	br. sly. l. ..	1·58	6·85	·006	·167	·28	·67	·42	·29	71·54	·0198	·1480	·0161	·0102	5,124	8,485	20,560	8,810	587	4,535	293	5·78	..	Med.	
3765	Ditto	gr. bl. peaty s.	7·87	14·52	·007	·787	·23	·21	·24	·33	57·81	·0291	·0700	·0393	·0231	15,110	4,460	4,018	6,244	557	1,348	446	4·79	..	Str.	
3775	'Dayboro' .. P	gr. c. s. s...	1·79	5·36	·004	·139	·12	·19	·08	·38	84·82	·0051	·0881	·0233	·0060	4,340	4,340	6,510	14,388	181	3,075	217	5·43	..	Med.	(23)
3776	Ditto .. P	gr. c. s. s.	2·24	5·21	·010	·137	·05	·30	·12	·56	84·05	·0202	·1324	·0080	·0165	4,700	1,754	10,175	19,300	701	4,525	568	6·02	..	Sl. med.	(24)
3777	Ditto .. P	..	..	8·13	..	·213	..	..	..	..	..	·0020	..	..	·0061	..	..	..	..	..	..	..	5·25	..	Med.	(25)
3778	Ditto .. P	..	..	8·35	..	·225	..	..	..	..	..	·0021	..	..	·0080	..	..	..	..	..	..	..	5·00	..	Med.	(26)
3779	Ditto .. P	..	..	9·46	..	·225	..	..	..	..	..	·0011	..	..	·0070	..	..	..	..	..	..	..	5·28	..	Med.	(27)
3780	Ditto .. P	..	..	8·19	..	·285	..	..	..	..	..	·0411	..	..	·0053	..	..	..	..	..	..	..	5·13	..	Med.	(28)
3781	Ditto .. P	..	..	7·12	..	·211	..	..	..	..	..	·0061	..	..	·0051	..	..	..	..	..	..	..	5·69	..	Med.	(29)
3782	Ditto .. P	..	..	6·93	..	·200	..	..	..	..	..	·0022	..	..	·0041	..	..	..	..	..	..	..	5·05	..	Str.	(30)
3783	Ditto .. P	..	..	6·73	..	·205	..	..	..	..	..	·0031	..	..	·0043	..	..	..	..	..	..	..	4·82	..	Str.	(31)

Table I.—ANALYSIS OF QUEENSLAND SOILS—*continued.*

Laboratory No.	Locality.	Description of Soils.	TOTAL ELEMENTS IN THE SOIL, CALCULATED ON SOIL DRIED AT 100° C.									Available Plant Food, Soluble in 1 per cent. Citric Acid.				Total Elements, Lb. per Acre, 12″ Deep.				Available Plant Food, Soluble in 1 per cent. Citric Acid. Lb. per Acre, 12″ Deep.			SOIL ACIDITY.			Remarks.
							Soluble in Hydrochloric Acid, Sp. Gr. 1·115.																	PH.			
			Humus.	Combined Water and other Organic Matter.	Chlorine.	Nitrogen.	Phosphoric Acid.	Lime.	Magnesia.	Potash.	Total Insoluble Matter.	Phosphoric Acid.	Lime.	Magnesia.	Potash.	Nitrogen.	Phosphoric Acid.	Lime.	Potash.	Phosphoric Acid.	Lime.	Potash.	Water Suspension 1 : 2	N/4 KCl. Suspension 1 : 2	Truog Test.	
			%	%	%	%	%	%	%	%	%	%	%	%	%											
3784	Dayboro' .. P	..	..	6·78	..	·171	..	..	..	..	..	·0033	..	..	·0074	..	..	..	..	..	..	..	5·36	..	Med.	(32)
3795	Ravensbourne, *via* Murphy's Creek	ch. cl. l. ..	3·13	14·85	·003	·276	·24	·59	·71	·03	37·65	·0031	·1996	·1361	·0101	7,470	6,521	16,006	889	83	5,394	273	6·96	5·31	Sl.	
3796	Mapleton, *via* Nambour	r. l. ..	2·99	13·67	·003	·322	·33	·19	·33	·01	34·90	·0030	·0842	·0100	·0025	8,718	8,908	5,091	318	83	2,282	67	5·87	5·17	Med.	
3800	Yandina	h. br. cl. s.	·78	8·46	·016	·182	·02	·07	·10	·04	78·91	·0008	·0351	·0075	·0032	4,871	560	1,060	1,120	22	641	87	5·80	4·71	Sl.	
..	(Subsoil of No. 3800)	r. br. cl. ..	·05	7·90	·018	·106	·02	·05	·08	·03	71·93	·0020	·0072	·0186	·0028	3,076	609	1,523	914	58	210	82	5·52	4·37	Med.	
3801	Yandina	br. l. ..	1·98	17·50	·014	·317	·05	·16	·22	·12	53·60	·0010	·0961	·0182	·0136	6,780	990	3,464	2,474	22	2,051	294	5·84	4·92	Sl.	
..	(Subsoil of No. 3801)	r. br. cl. l.	·86	11·86	·011	·145	·07	·02	·10	·02	59·80	·0030	·0101	·0086	·0025	3,440	1,599	533	533	72	237	61	5·35	4·33	Med.	
3802	Yandina	lt. br. cl. l.	1·25	10·22	·017	·201	·03	·10	·08	·04	75·54	·0011	·0431	·0081	·0062	5,480	864	2,592	1,153	29	1,161	167	5·43	4·62	Med.	
..	(Subsoil of No. 3802)	rd. br. cl. l.	·64	8·65	·037	·135	·02	·02	·05	·03	74·41	·0030	·0088	·0062	·0032	3,789	587	587	581	85	246	91	5·24	4·54	Med.	
3894	Sunnybank ..	gr. br. s. s.	·50	1·21	·002	·025	·11	·11	·02	·01	96·27	·0745	·0580	·0029	·0012	972	4,278	4,278	389	2,881	2,244	47	5·24	4·87	Med.	
..	(Subsoil of No. 3894)	r. s. s. ..	·35	1·36	·002	·015	·03	·08	·02	·01	96·14	·0121	·0284	·0025	·0012	..	..	..	..	..	..	..	5·40	5·18	Med.	
3895	Sunnybank ..	r. br. s. s.	·55	2·64	·001	·045	·12	·15	·02	·01	92·81	·0525	·0567	·0048	·0011	1,701	4,536	5,670	378	1,962	2,117	42	5·56	5·18	Med.	
..	(Subsoil of No. 3895)	r. br. s. s...	·27	1·73	·001	·020	·01	·08	·04	·01	93·38	·0017	·0288	·0033	·0008	..	..	..	..	..	..	..	5·19	5·03	Med.	
3805	Hunchy, Canning P	lt. br. s. l...	..	5·34	..	·089	·060	..	..	·09	..	·0170	..	..	·0271	..	..	..	..	..	..	..	5·15	..	..	(33)
3806	Ditto .. P	br. sl. ..	..	5·78	..	·103	·044	..	..	·12	..	·0050	..	..	·0063	..	..	..	..	..	..	..	5·41	..	..	(34)
3807	Ditto .. P	lt. br. s. l...	..	6·29	..	·115	·046	..	..	·11	..	·0063	..	..	·0041	..	..	..	..	..	..	..	5·44	..	..	(35)
3808	Montville, Canning P	br. l. ..	..	21·05	..	·478	·318	..	..	·03	..	·0051	..	..	·0282	..	..	..	..	..	..	..	4·72	..	..	(36)
3809	Ditto .. P	d. br. l. ..	..	21·68	..	·500	·544	..	..	·01	..	·0083	..	..	·0113	..	..	..	..	..	..	..	5·69	..	..	(37)
3810	Ditto .. P	d. br. l. ..	..	22·62	..	·545	·530	..	..	·07	..	·0111	..	..	·0184	..	..	..	..	..	..	..	6·49	..	..	(38)
3832	Palmwoods .. P	r. br. s. l. ..	1·69	6·63	·006	·177	·07	·07	·04	·02	79·2	·0052	·0299	·0097	·0038	6,208	2,455	2,455	547	193	1,000	123	6·24	..	V. sl.	(39)
3833	Ditto .. P	lt. br. s. s.	1·12	2·30	·004	·096	·06	·10	·03	·02	93·0	·0143	·0247	·0087	·0016	3,616	2,208	3,616	719	537	925	61	6·0	..	V. sl.	(40)
3839	Montville, Canning P	..	..	22·96	..	·502	·31	·17	..	..	..	·0058	·0337	..	·0169	..	..	..	..	..	..	..	4·3	..	..	(41)
3840	Ditto .. P	..	..	21·12	..	·464	·23	·34	..	..	..	·0024	·1124	..	·0085	..	..	..	..	..	..	..	5·8	..	..	(42)
3841	Ditto .. P	..	..	19·83	..	·412	·29	·55	..	..	..	·0028	·2463	..	·0236	..	..	..	..	..	..	..	6·2	..	..	(43)
3858	Wamuran .. P	..	..	11·37	..	·068	·03	·085	..	·01	..	·0039	·012	..	·0037	..	..	..	..	..	..	..	4·58	..	..	(44)
3859	Ditto .. P	..	..	14·07	..	·075	·03	·086	..	·02	..	·0050	·019	..	·0042	..	..	..	..	..	..	..	4·65	..	..	(45)
3860	Ditto .. P	..	..	13·26	..	·092	·02	·079	..	·01	..	·0020	·015	..	·0036	..	..	..	..	..	..	..	5·14	..	..	(46)
3861	Ditto .. P	..	..	8·82	..	·057	·03	·07	..	·01	..	·0012	·024	..	·0042	..	..	..	..	..	..	..	5·16	..	..	(47)

3900	Elimbah .. P	gr. s. s. ..	1·41	3·89	·002	·074	·09	·14	·04	·02	90·74	·0200	·0464	·0099	·0065	2,581	3,182	4,950	707	700	1,623	226	6·06	4·65	Str.	(48)
3901	Ditto .. P	gr. s. s. ..	1·51	3·37	·001	·074	·09	·11	·04	·01	91·49	·0198	·0374	·0073	·0029	2,640	3,255	3,978	362	709	1,338	105	5·69	4·38	Str.	(49)
3902	Mooloolah, Canning P	gr. s. s. ..	..	5·9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5·42	..	..	(50)
3903	Ditto .. P	gr. s. s. ..	..	5·0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5·08	..	..	(51)
3904	Ditto .. P	gr. s. s. ..	..	3·5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5·04	..	..	(52)
3898	Lanefield, Churchill	gr. cl. l. ..	1·18	9·10	·003	·203	·22	1·57	1·49	·29	64·25	·0211	·3259	·1162	·0088	6,510	7,196	50,368	9,252	675	10,440	281	6·55	5·77	V. sl.	
3899	Ditto	gr. cl. l. ..	·96	6·94	·006	·142	·15	1·34	1·49	·27	69·03	·0206	·2607	·0634	·0069	4,592	4,797	43,172	8,566	665	6,481	223	6·84	5·95	Sl.	
3822	Queensland Forest Service, Yarraman Nursery F	scrub soil cover	2·76	12·32	..	·279	..	..	..	..	..	·0015	·2600	·0251	·0126	7,865	..	..	..	42	7,342	356	6·8	..	..	(5)
3823	Ditto .. F	sawdust cover	3·16	13·28	..	·387	..	..	..	..	..	·0022	·3420	·0578	·0184	10,780	..	..	..	61	9,530	516	7·2	..	..	(6)
3824	Benarkin Nursery F	scrub soil cover	2·66	7·74	..	·178	..	..	..	..	..	·0088	·0930	·0150	·0099	5,894	..	..	..	291	3,090	330	6·3	..	..	(7)
3825	Ditto .. F	sawdust cover	2·69	7·33	..	·171	..	..	..	..	..	·0091	·0801	·0128	·0078	5,461	..	..	..	290	2,560	250	6·4	..	..	(8)
3905	Forestry Sub-Department, R. 207, Monsidale F	lt. br. l. ..	8·24	19·22	·003	·680	·131	1·76	·71	·66	56·58	·005	·6769	·0593	·0126	14,792	2,921	29,240	14,716	108	14,728	274	6·4	5·66	V. sl.	
3906	Jimna, *via* Kilcoy F	lt. br. l. ..	2·82	6·22	·005	·257	·12	·294	·71	·74	73·5	·0076	·1070	·0292	·0060	7,686	3,589	8,786	21,940	227	3,200	179	5·76	4·41	Str.	
3907	Ditto .. F	lt. y. cl. l...	·57	4·78	·005	·045	·05	·084	·80	·85	76·3	·001	·0087	·0163	·0069	1,720	1,870	3,200	32,494	38	332	263	5·9	3·79	V. str.	
	NEW SOUTH WALES—																									
3826	Wardell .. P	w. s. and organic matter	3·76	6·26	·029	·189	·008	·035	·045	·0126	92·6	·0003	·0130	·0099	·0013	6,236	270	1,180	418	11	431	44	4·03	3·98	Str.	(53)
	DARWIN—																									
3908	Delamere Station ..	gr. cl. ..	·59	6·91	·006	·072	·02	·47	·48	·24	71·25	·0009	·1259	·0306	·0159	2,332	696	15,315	7,658	28	4,072	515	6·29	4·89	Nil	
3909	Willeroo Station ..	ch. cl. l. ..	·77	4·50	·01	·086	·01	·59	·69	·19	75·91	·0023	·3177	·03032	·0100	3,289	392	22,320	7,048	86	12,100	380	7·20	5·81	Nil	

Pineapple Soils (Marked P)

Carbon (C):—(19) 1·37, (20) 1·60, (21) 2·30, (22) 1·28, (23) 3·46, (24) 3·67, (25) 1·79, (26) 1·91, (27) 2·32, (28) 2·01, (29) 2·07, (30) 1·80, (31) 1·86, (32) 1·65, (33) 2·19, (34) 2·20, (35) 2·28, (36) 4·81, (37) 5·84, (38) 5·70, (39) ——, (40) ——, (41) 4·57, (42) 4·10, (43) 3·64, (44) 1·37, (45) 1·60, (46) 2·30, (47) 1·28, (48) ——, (49) ——, (50) 3·13, (51) 2·73, (52) 2·00, (53) 3·6.

Replacable Potash (K) as m.e.:—(19) ·616, (20) ·380, (21) ·154, (22) ·226, (23) ·355, (24) ·807, (25) ·23, (26) ·29, (27) ·18, (28) ·27, (29) ·28, (30) ·14, (31) ——, (32) ·26, (33) ·427, (34) ·437, (35) ·221, (36) 1·079, (37) ·689, (38) 1·60, (39) ·29, (40) ·33, (41) ——, (42) ——, (43) ——, (44) ·616, (45) ·380, (46) ·154, (47) ·226, (48) 1·399, (49) ·1242, (50) ——. (51) ——, (52) ——, (53) ·24.

Table II.—SOME QUEENSLAND SOILS (PHYSICAL PROPERTIES AND MECHANICAL ANALYSES).

Laboratory No.	Locality.	Description of Soils.	Ph. Water Suspension 1 : 2.	Properties of the Soil.								Mechanical Analyses.							Chemical Analyses.		
				Apparent Specific Gravity.	Weight of Soil per Acre, 12" deep.	Capacity for Water.	Absorbed Weight of Water, 12" deep.	Capillarity (in Inches).				Fine Gravel. 1–2 m.m.	Coarse Sand. ·2–1 m.m.	Fine Sand. ·04–·2 m.m.	Silt. ·01–·04 m.m.	Fine Silt. ·002–·01 m.m.	Clay. Less than ·002 m.m.	Organic Matter and Water.	Humus.	Other Organic Matter and Combined Water.	Nitrogen.
								After 3 Hours.	After 6 Hours.	After 24 Hours.	After 48 Hours.										
					Tons.	%	Tons.					%	%	%	%	%	%	%	%	%	%
	Cook—																				
3785	Dimbulah .. .. .. T	..	6·12	1·85	2,246	..	..	11	13	18	20½	·4	6·3	73·0	5·5	6·6	2·2	3·3	1·24	2·10	·073
3786	Ditto .. .. .. T	..	6·35	1·39	1,688	..	..	13½	16	20¾	23	·2	8·1	74·2	6·4	5·7	1·7	2·1	·72	2·31	·045
3787	Ditto .. .. .. T	..	6·73	1·70	2,084	..	..	7¾	9¾	14½	15½	22·1	49·1	18·6	4·7	3·7	·7	1·6	·64	·92	·036
3788	Ditto .. .. .. T	lt. y. sd. ..	6·28	1·79	2,173	..	..	7¼	9	13	15	19·8	41·4	30·3	4·3	1·4	1·6	1·2	·65	·59	·028
3789	Koak, *via* Mareeba.. .. T	lt. y. sd. ..	6·91	1·44	1,748	..	..	10¾	13¼	18¼	>20½	6·1	17·4	55·9	9·3	3·1	2·9	2·7	1·04	2·68	·062
3790	Paddy's Green, Mareeba .. T	r. s. cl.	6·68	1·41	1,712	..	..	7½	8¾	11¾	13¾	16·8	52·4	16·5	3·4	4·5	2·9	3·1	·88	2·25	·067
3791	Chewko, *via* Mareeba .. T	r. br. sd. ..	6·70	1·52	1,845	..	..	6½	7½	8¾	9¾	45·2	29·6	13·6	4·2	3·2	2·5	1·7	·67	1·05	·062
3792	Emerald Creek .. .. T	r. sd. cl. ..	7·11	1·54	1,870	..	..	10¾	13½	19½	23	15·8	37·8	27·4	6·6	5·2	2·5	2·9	·80	2·12	·056
3793	Dimbulah .. .. .. T	br. sd.	6·63	1·83	2,222	..	..	7½	9¾	15¼	18½	32·2	37·9	19·6	3·5	3·7	1·6	1·4	·47	·97	·073
3794	Ditto .. .. .. T	lt. r. s.	7·04	1·58	1,918	..	..	..	..	..	..	16·6	50·3	20·7	4·2	4·7	1·2	2·2	·64	1·54	·067
3797	Wongabel Nursery, Atherton F	lt. br. l. ..	8·08	1·22	1,481	44	652	4½	6¾	7¾	8¾	3·6	11·8	32·8	15·7	15·7	6·7	10·5	1·42	8·97	·197
3798	Ditto .. .. .. F	lt. br. l. ..	7·59	1·22	1,481	44	652	7	10	11¼	12¾	1·5	7·4	33·5	16·4	18·0	11·4	8·5	1·19	7·23	·162
3799	Ditto .. .. .. F	lt. br. cl. l. ..	7·30	1·22	1,481	41	607	7½	10½	12	13½	·5	5·7	32·6	11·8	20·2	18·0	8·1	·80	7·21	·122
	Burnett—																				
3766	Monto	gr. cl. l... ..	7·23	1·16	1,408	47	662	5½	7	10½	12	3·7	11·5	29·7	21·1	14·1	6·5	12·1	3·90	8·21	·377
..	(Subsoil of No. 3766)	gr. br. cl. l. ..	7·37	1·31	1,590	38	604	5½	6½	11	12⅔	10·1	10·6	27·6	14·6	19·4	11·1	7·9	2·42	5·46	·199
3767	Monto	gr. cl. l. ..	7·53	1·20	1,457	47	685	5½	7	10½	11⅔	4·7	7·3	28·9	17·1	19·2	10·2	13·5	3·26	10·21	·316
..	(Subsoil of No. 3767)	lt. gr. cl. l. ..	7·29	1·24	1,506	45	678	2	3	7½	9	3·1	5·8	25·9	10·4	29·1	12·5	10·9	1·67	9·23	·175
3768	Monto	gr. cl. l. ..	7·57	1·08	1,311	50	656	6½	7¾	10½	11½	1·0	5·0	35·5	16·0	19·9	9·5	11·9	4·60	7·31	·374
..	(Subsoil of No. 3768)	gr. cl. l. ..	7·01	1·16	1,408	45	634	4¾	6	9	10	1·7	5·7	29·6	20·0	19·4	13·4	10·1	3·39	6·67	·310
3891	Queensland Forest Service, parish Grongah, county McKenzie F	gr. l.	5·80	1·23	1,493	39	582	5	6½	9¾	11	4·6	6·3	25·8	20·3	25·7	7·8	7·8	1·50	6·21	·168
3892	Ditto .. .. .. F	gr. br. l. ..	5·27	1·37	1,663	26	432	5½	8	14¼	17⅞	1·7	7·0	31·6	26·8	22·0	4·2	3·5	·98	2·49	·085
3893	Ditto .. .. .. F	gr. l.	5·81	1·18	1,433	41	588	4¼	5¼	8	9	3·9	6·2	16·4	18·7	35·4	7·0	9·1	2·04	7·02	·199
	Wide Bay—																				
3828	Imbil Nursery .. .. F	..	6·30	1·02	..	..	..	..	..	..	..	·27	2·50	29·90	19·9	23·3	9·0	15·5	..	..	·181
3829	Ditto .. .. .. F	..	6·21	1·09	..	..	..	..	..	..	..	1·65	12·70	27·30	16·0	15·2	14·1	11·7	..	..	·135
3830	Ditto .. .. .. F	..	6·33	1·05	..	..	..	..	..	..	..	Nil	3·75	31·55	18·6	19·1	13·9	13·1	..	..	·172
3831	Ditto .. .. .. F	..	6·40	1·11	..	..	..	..	..	..	..	1·0	8·79	29·59	17·85	18·57	12·38	12·01	..	..	·163

	MORETON—																					
3775	Dayboro'	P	gr. c. s.s. ..	5·43	1·33	1,615	30	485	8¼	10	12	14	14·5	18·55	27·02	12·78	15·19	3·12	..	1·79	5·36	·139
3776	Ditto	P	gr. c. s.s. ..	6·02	1·29	1,566	30	470	5½	7¾	9	10¾	22·15	21·43	20·40	8·91	15·25	3·12	..	2·24	5·21	·137
3781	Ditto	P	..	5·69	..	..	41	..	..	..	..	..	4·23	25·80	31·75	7·67	13·58	9·43	..	..	..	·211
3782	Ditto (Subsoil)	P	..	5·05	..	..	30	..	7½	10	11¼	12½	..	..	..	..	..	..	..	..	..	·200
3783	Ditto	P	..	4·82	..	..	42	..	..	..	..	..	7·59	26·31	28·92	6·99	12·77	9·21	6·73	..	..	·205
3901	Elimbah	P	gr. s.s.	5·69	1·33	1,615	35	565	8	9½	11¾	13	9·1	45·2	24·5	2·3	11·0	2·4	4·9	1·51	3·37	·074
3902	Mooloolah, Canning ..	P	gr. s.s.	5·42	..	..	30	..	..	..	..	..	2·1	64·2	15·0	3·2	6·2	2·6	5·9	..	5·9	..
3903	Ditto	P	gr. s.s.	5·08	..	..	29	..	..	..	..	..	5·0	58·6	21·5	3·7	4·7	1·0	5·0	..	5·0	..
3904	Ditto	P	gr. s.s.	5·04	..	..	22	..	..	..	..	..	14·9	59·4	13·5	2·8	4·3	1·0	3·5	..	3·5	..
3822	Yarraman Nursery ..	F	scrub soil cover	6·8	1·20	..	..	..	..	..	..	..	2·3	4·11	25·14	18·13	22·43	13·30	15·08	..	..	·279
3823	Ditto	F	sawdust cover..	7·2	1·18	..	..	..	..	..	..	..	2·07	5·05	24·83	18·94	23·4	10·31	16·44	..	..	·387
3824	Benarkin Nursery	F	scrub soil cover	6·3	1·29	..	..	..	..	..	..	..	1·2	9·1	28·9	18·7	24·3	5·74	10·4	..	..	·178
3825	Ditto	F	sawdust cover..	6·4	1·24	..	..	..	..	..	..	..	·87	8·88	29·7	21·1	23·1	5·94	10·02	..	..	171
3905	Jimna, *via* Kilcoy	F	lt. br. l. ..	6·4	0·8	971	92	893	2¼	3	4¾	5¾	3·7	9·1	16·1	14·1	21·7	6·2	27·5	8·24	19·22	·680
3906	Ditto	F	lt. br. l. ..	5·76	1·1	1,335	50	667	1¾	3	4¾	6	2·9	9·8	16·0	12·8	36·6	12·0	9·0	2·82	6·22	·257
3907	Ditto	F	lt. y. cl. l. ..	5·9	1·44	1,705	30	510	2	2¾	5½	8	7·5	12·8	20·6	12·4	27·0	13·2	5 4	·57	4·78	·045

Table III.—ANALYSES OF PASTURE GRASSES, ROUGHAGE, HERBAGE, AND SHRUBS.

Number of Analysis.	Month Cut.	Name of Grass, Herbage, or Shrub.	Local Name.	District.	Analysis of Water-free Material.							Remarks. (Chiefly made by senders.)
					Crude Protein.	Crude Fat.	Carbohydrates.	Crude Fibre.	Crude Ash.	Lime, CaO.	Phosphoric Acid, P_2O_5.	
					%	%	%	%	%	%	%	
297	..	Ensilage, Stack No. 1 ..	..	Gayndah	7·3	·9	60·0	20·6	11·2	·539	·265	Nine months old.
298	..	Ensilage, Stack No. 2 ..	..	Gayndah	5·3	·8	57·7	26·0	10·2	·519	·335	Six months old.
654	July	..	Italian Rye grass ..	Ingham	16·5	2·5	35·1	28·3	17·6	·629	·820	Sample of five acres grown from seed.
981A	July	*Mimosa Pudica* (leaves only)	Sensitive Plant	Mackay	23·8	1·3	48·2	17·9	8·8	1·723	·654	Six head of cattle grazing on this plant with a little *Stylosanthes mucronata*, are in excellent condition.
981B	July	*Mimosa Pudica* (whole plant)	Sensitive Plant	Mackay	10·3	·7	41·4	42·9	4·7	1·079	·499	
1307	..	Paspalum Ensilage	..	Maleny	10·1	1·4	44·0	37·0	7·5	·582	·630	About one foot waste in stack. Good aroma, and relished by stock.
1525	August ..	..	Bottle Tree Pith ..	Komini	2·5	·7	62·0	23·1	11·7	2·794	·150	..
2136A	September ..	..	Yam	Cairns (M.)	6·7	·1	83·9	4·5	4·8	·070	·359	Starch, 74·4 per cent. Glucose, 1·56 per cent. Sucrose, 1·95 per cent. Sound and undecayed portion.
2136B	September ..	..	Yam	Cairns (M.)	5·2	·2	77·2	9·5	7·9	·280	·280	Starch, 57·55 per cent. Glucose, ·98 per cent. Sucrose, 2·46 per cent. Partly decayed portion.
2739	October ..	*Geranium dissectum*	..	Toowoomba ..	10·1	1·0	56·6	21·0	11·3	2·386	1·423	..
2946	October ..	*Erodium cygnorium*	Crane Bill	Toowoomba ..	18·9	1·7	43·2	23·1	13·1	2·436	·920	..
3463	December ..	*Paspalum vaginatum*	Giant Marine Couch ..	Rockhampton (B.)..	8·6	1·5	50·7	31·4	7·8	·584	·385	Beach paddock; windmill end of main paddock.
3464	December ..	*Paspalum distichum*	Swamp Couch	Rockhampton (F.V.)	7·1	1·1	56·4	26·9	8·5	·304	·477	House paddock.
3580	December ..	Composite Pasture Sample ..	..	Rockhampton (B.)..	7·8	1·7	48·0	31·7	10·8	·396	·341	Main paddock; clay dam end.
3581	December ..	Composite Pasture Sample.. Chiefly *Themeda australis* and *Sehima nervosa*	..	Rockhampton (B.)..	5·1	1·5	43·9	32·5	17·0	·363	·199	Heifer paddock.
3582	December ..	*Sorghum fulvum*	..	Rockhampton (B.)..	7·5	1·5	48·7	30·2	12·1	·307	·248	Home paddock.
3583	December ..	*Crotalaria* sp.	..	Rockhampton (B.)..	15·7	1·3	48·3	19·9	14·8	5·047	·394	..
3584	December ..	*Sporobolus virginicus*	Marine Couch	Rockhampton (F.V.)	9·7	2·1	45·4	27·1	15·7	·402	·702	House paddock.
3947	January ..	*Dactyloctenium* sp.	..	Brisbane	12·1	1·6	40·6	33·1	12·6	·457	·272	H.C.N. negative. Vigorous leafy growth.
4010	December ..	*Cynodon plectostachyum* ..	Budgee grass	Roma (B.)	7·8	2·1	49·3	29·3	11·5	1·329	·649	..
4089	January ..	..	Mitchell grass roughage..	Nelia	4·5	·7	41·4	34·8	18·6	1.250	·551	..
4226	January ..	..	Mitchell grass	Atherton	3·8	1·6	48·6	37·2	8·8	·266	·108	..
5734	March ..	*Crotalaria* sp.	..	Lamb Island ..	21·6	1·3	46·9	20·7	9·5	1·982	·431	Old.

5735	March ..	*Crotalaria* sp.	..	Lamb Island ..	27·0	1·6	41·4	17·7	12·3	1·949	·671	Young.
5830	March ..	*Crotalaria* sp.	..	Nambour	17·9	1·1	42·9	30·4	7·7	1·232	·697	..
6420	April ..	..	Blue Couch	Brisbane	10·7	2·3	50·7	26·3	10·0	·710	·793	..
6862	April ..	..	Chop-chop	Bundaberg	6·1	·9	49·3	32·1	11·6	·362	·448	Cane variety, C.O. 290.
6863	April ..	..	Chop-chop	Bundaberg	4·5	·9	51·6	33·3	9·7	·289	·391	Cane variety P.O.J. 2878.
6864	April ..	..	Chop-chop	Bundaberg	6·8	1·0	50·1	33·7	8·4	·365	·499	Cane variety, Oramboo.
7042	April ..	..	Grass roughage	Hughenden (W.) ..	5·8	..	..	..	18·0	·144	·151	Sample too small for complete analysis.
7085	May	..	Grass roughage	Nelia	3·1	·6	56·2	29·0	11·1	·210	·240	..
7369	..	*Vitis opaca*	..	Brisbane	4·4	·3	73·6	11·2	10·5	2·271	·182	Native grape, common in coastal districts of Queensland. Relished by pigs.
7552	May	*Astrebla squarrosa*	Bull Mitchell	Katherine (D.W.) ..	8·7	..	..	..	..	·314	·264	Insufficient sample for complete analysis.
7553	May	*Panicum decompositum* ..	Barley grass	Katherine (D.W.) ..	5·8	..	..	..	..	·202	·198	Insufficient sample for complete anlaysis.
7554	May	*Dichanthium* sp.	Rye grass	Katherine (D.W.) ..	5·3	..	..	..	..	·291	·203	Insufficient sample for complete analysis.
7555	May	*Iseilema trichopus*	Flinders grass	Katherine (D.W.) ..	3·0	..	..	..	..	·224	·124	Insufficient sample for complete analysis.
7556	May	*Dichanthium* sp.	Star grass..	Katherine (D.W.) ..	5·0	..	..	..	..	·224	·179	Insufficient sample for complete analysis.
7557	May	*Schizachyrium obliquiberbis* ..	Bullwaddi grass	Katherine (D.W.) ..	2·2	..	..	..	..	·358	·050	Insufficient sample for complete analysis.
7558	May	*Iseilema vaginiflora*	Flinders grass	Katherine (D.W.) ..	..	..	..	..	..	·369	·140	Insufficient sample for complete analysis.
7559	May	*Panicum decompositum* ..	Barley grass	Katherine (D.W.) ..	6·0	..	..	..	..	·358	·406	Insufficient sample for complete analysis.
7560	May	*Dactyloctenium radulans* ..	Button grass	Katherine (D.W.) ..	6·5	..	..	..	..	·851	·340	Insufficient sample for complete analysis.
7561	May	*Themeda australis*	Kangaroo grass	Katherine (D.W.) ..	4·5	..	..	..	..	·426	·105	Insufficient sample for complete analysis.
7562	May	*Sehima nervosum*	Rye grass	Katherine (D.W.) ..	5·6	..	..	..	..	·515	·192	Insufficient sample for complete analysis.
7563	May	*Brachyachne convergens* ..	Couch grass	Katherine (D.W.) ..	6·5	..	..	..	..	·605	·082	Insufficient sample for complete analysis.
7564	May	*Dichanthium* sp.	Foxtail	Katherine (D.W.) ..	..	..	..	..	..	·349	·132	Insufficient sample for complete analysis.
7565	May	*Eragrostis japonica*	Sugar grass	Katherine (D.W.) ..	9·5	..	..	..	..	·314	·387	Insufficient sample for complete analysis.
7566	May	*Enneapogon avenaceus* ..	Bottlewasher	Katherine (D.W.) ..	6·9	..	..	..	..	1·120	·250	Insufficient sample for complete analysis.
7567	May	*Iseilema vaginiflora*	Bull Flinders	Katherine (D.W.) ..	..	..	..	..	..	·302	·127	Insufficient sample for complete analysis.
7568	May	*Sorghum plumosum*	Big Spear	Katherine (D.W.) ..	1·8	..	..	..	..	·526	·082	Insufficient sample for complete analysis.
7569	May	*Heteropogon contortus* ..	Little Spear	Katherine (D.W.) ..	3·7	..	..	..	..	·179	·216	Insufficient sample for complete analysis.
7578	June ..	..	Roughage..	Mackinlay	12·8	4·0	45·3	25·0	12·9	3·541	·243	Said to be a mixture of grass stubble and shrubs in about the proportion available to the stock.

REPORT OF SEEDS, STOCK FOODS, FERTILIZERS, PEST DESTROYERS, AND VETERINARY MEDICINES ACTS BRANCH.

During the year under review, the Department experienced the loss of one of its valued officers, Mr. F. F. Coleman, who for many years efficiently carried out the duties of officer-in-charge of this Branch.

The official contacts made by him were very widespread, and the news of his death brought forth many expressions of regret from the farming community, as well as from those with whom he was associated officially in Queensland, and in correspondence overseas.

A considerable amount of time was taken up during the latter part of 1934 in gathering data and drafting Regulations under the Pest Destroyers' Veterinary Medicines, and Stock Foods Acts.

Printers' Proofs.

The advisability of dealers submitting printers' proofs of all labels has been demonstrated many times during the period under review.

Labels.

Vital alterations to labels have been insisted upon, but where the alterations are of a minor nature permission has been given to those concerned to use up existing stocks. It therefore follows that the present year can be looked upon as a transitionary period so far as many labels are concerned, but ultimately these will be amended to comply absolutely with the requirements of the amended Regulations.

Inspectors' Visits.

From 1st July, 1934, to 30th January, 1935, each of the following towns outside the Brisbane area was paid a visit (except where otherwise stated) by inspectors under the various Acts:— Boonah, Bundaberg, Forest Hill (twice), Gatton (twice), Goomeri, Gympie, Kingaroy, Laidley, Mackay, Murgon, Rockhampton, Stanthorpe, Wondai, Gayndah, Mundubbera, Nerang, Harrisville.

Seed Acts, 1934-1935.

From 1st July, 1934, to 30th June, 1935, 1,874 samples were examined at this Seed Testing Station, such being received from the following sources:—

Seed Samples Received from.	Number of Samples.
Seed vendors	363
Growers selling seeds	64
Inspectors under the Seeds Acts	267
Inspectors under the Commerce Acts	1,006
Farmers who have purchased seed for their own sowing, therefore examined free	35
Government Departments	139
Total samples	1,874
Repeat and experimental tests	314
Total germination tests	2,188

Australian Seed Convention.

During the month of November, 1934, a convention of Australian and New Zealand seed merchants was held in Melbourne. At the same time a conference of seed-testing officers from the following States was held:—New South Wales, Victoria, South Australia, Tasmania, and Queensland. The conference was presided over by Dr. B. T. Dickson, Chief of the Division of Plant Industry, Council for Scientific and Industrial Research, Canberra. There was also present, Mr. E. Mackinnon, Director of the Division of Plant Quarantine, Commonwealth Department of Health, Canberra. During the short time available an endeavour was made to reach uniformity relative to the technique of seed testing, and at the same time fix provisional standards for seeds imported and also determine what plants or seeds should be prohibited from overseas, for the information and necessary action of the Commonwealth Quarantine Service.

As a basis of operations the technique in operation in other parts of the world, known as the International Rules for Seed Testing, was adopted with slight modification to suit local conditions.

Standards of minimum germination and maximum inert and weed seed content were agreed upon.

The instance of uniform technique was extensively discussed, but no definite lines of operation could be laid down owing to the great variation in apparatus available to the different States. Until this position is corrected absolute uniformity between the various States will be impossible.

This conference stressed very forcibly the marked difference in crops and conditions between the tropical and semi-tropical portion of Australia interested in Mauritius beans, Rhodes grass, paspalum, sorghums, molasses grass, cowpeas, &c., and in the temperate zones interested in Agrostis, Poas, &c.

An endeavour is to be made to carry out investigational work in two or more seed-testing stations at the same time on the same samples, also to start a system of exchanging ideas and the results of investigational work in the laboratory.

At present this laboratory is having built an incubator for Rhodes and paspalum grass seeds with a capacity of seventy-five trays. Also for prechilling purposes, an ice-chest has been added to our equipment.

The following table sets out some of the principal minimum germinations that were agreed upon at the Seed Convention, and will be adopted as uniform throughout Australia.

Kind of Seed.	Minimum Germination.	
	Uniform Standard.	Present Queensland Standard.
	Per Cent.	Per Cent.
Barley	80	85
Beans—		
French	70	75
Mauritius	75	60
Rice	75	..
Beet	*55	*55
Cabbage	60	65
Carrot	50	55
Cauliflower	60	60
Cotton	70	70
Cowpeas	70	65
Cucumber	70	65
Grasses—		
Canary	65	70
Couch	40	30
Molasses	20	..
Panicum antidotale	40	..
Paspalum dilatatum	30	20
Phalaris tuberosa	55	..
Prairie	65	50
Rhodes	30	30
Leek	50	50
Lettuce	75	65
Lucerne	75	65
Maize	80	85
Mangel	*55	*55
Marrow	65	65
Millets—		
Foxtail—		
Tall Late Setaria (Giant Panicum)	75	70
Short Early Setaria	75	70
Millets—*continued.*		
Barnyard—		
Japanese	75	70
White Panicum	75	70
Marestail—		
Red French	75	70
White French	75	70
Oats	80	80
Onion	50	60
Parsnip	40	25
Peanuts	60	..
Peas	75	75
Pumpkin	75	65
Radish	75	65
Rape	70	70
Rock Melon	70	65
Rye	80	80
Sorghum	70	70
Stylosanthes sundiaca	40	..
Sudan	65	70
Swede	65	65
Tares	60	75
Tobacco	60	55
Tomato	65	65
Turnip	70	65
Water Melon	65	60
Wheat	80	85

* Clusters.

GERMINATING CAPACITY OF THE PRINCIPAL SEEDS FOR SOWING EXAMINED FOR THE PURPOSES OF THE COMMERCE (TRADE DESCRIPTIONS) ACT, 1905, DURING THE YEAR ENDED 30TH JUNE, 1935.

Kind of Seed.	Imported from—	GERMINATION. Highest recorded during 1934-35.	Percentage prescribed by Queensland Regulations.	Average of samples up to Queensland standard.	Average of samples below Queensland standard.	Lowest recorded during 1934-35.	NUMBER OF SAMPLES. Up to Queensland standard.	Below Queensland standard.	Total number of samples examined.	Approximate Quantity of Seed Imported, 1934-35.
		%	%	%	%	%				
Barley	England	95	85	93	..	91	3	..	3	3 bush.
Beans—										
Broad ..	New Zealand	99	75	92	..	85	3	..	3	3 bush.
French ..	Norfolk Island	99	75	92	53	11	129	30	159	150 sacks
French ..	New Zealand, U.S.A., England	99	75	97	..	92	9	..	9	3 sacks
Lima ..	U.S.A., New Zealand	99	75	94	..	96	4	..	4	59 lb.
Mauritius ..	Fiji, New Guinea, Java, Thursday Island, Chapman Island	98	60	82	27	11	33	7	40	1,266 bags
Rice	New Guinea	94	75	94	53	47	1	3	4	28 bags
Beet	New Zealand, England, Holland, Germany, France, Japan	*92	*55	*73	*41	*26	60	5	65	1,814 lb.
Cabbage ..	U.S.A., Holland, England, France, Germany, Japan ..	96	65	86	46	46	54	1	55	512 lb.
Carrot	New Zealand, England, Holland, France, Japan ..	91	55	73	44	44	45	1	46	977 lb.
Cauliflower ..	Germany	93	60	93	..	93	1	..	1	3 lb.
Cucumber ..	New Zealand, U.S.A., England, Holland, France ..	99	65	92	..	75	24	..	24	377 lb.
Cocksfoot ..	New Zealand	57	50	57	27	27	1	1	2	10 bags
Cowpeas ..	New Guinea	99	65	82	57	55	6	3	9	63 bags
Clover—										
Red ..	New Zealand	98	†75	98	..	98	1	..	1	5 bags
White ..	New Zealand	88	†70	85	..	83	2	..	2	3 bags
Endive	Holland	72	†55	72	..	72	1	..	1	4 lb.
Kale	U.S.A.	88	†60	88	..	88	1	..	1	7 lb.
Kohl Rabi ..	Holland	91	†60	89	..	88	2	..	2	21 lb.
Lettuce ..	New Zealand, France, England, U.S.A.	99	65	93	..	71	34	..	34	402 lb.
Lucerne ..	New Zealand	86	65	86	..	86	1	..	1	20 bags
Lupins	New Zealand	98	†60	98	..	98	1	..	1	2 bags
Mangel	England, Holland, New Zealand, France, Germany ..	*85	*55	*68	*53	*53	22	1	23	1,819 lb.
Marrow ..	New Zealand, England, France	99	65	89	..	78	28	..	28	360 lb.
Melon—										
Rock ..	U.S.A., New Zealand	98	65	87	35	35	9	1	10	77 lb.
Water ..	U.S.A., New Zealand	92	60	85	..	72	40	..	40	907 lb.
Mustard ..	England, New Zealand	99	70	99	..	99	2	..	2	14 lb.
Onion	England, Holland, France	92	60	81	..	68	4	..	4	12 lb.
Parsnip ..	New Zealand, Holland	74	†40	62	..	51	4	..	4	29 lb.
Parsley ..	Holland, Germany, France	72	†40	63	..	50	4	..	4	124 lb.
Peas	New Zealand, France	99	75	94	67	67	302	1	303	368 bags
Pumpkin ..	New Zealand, U.S.A.	98	65	93	..	88	2	..	2	32 lb.
Radish ..	New Zealand, England, Holland, France, Japan ..	96	65	87	63	63	29	1	30	550 lb.
Rape	England, New Zealand	94	70	91	..	84	7	..	7	8 bags
Rye Grass ..	New Zealand	95	60	88	..	80	13	..	13	84 bags
Sweetcorn ..	U.S.A.	98	75	89	..	83	3	..	3	16 lb.
Swede	Germany, England, France, Holland, New Zealand	96	65	87	68	68	8	1	9	173 lb.
Tomato ..	U.S.A., New Zealand, Japan, France	95	65	85	..	75	27	..	27	149 lb.
Turnip	New Zealand, U.S.A., France, England, Holland ..	99	65	88	49	22	30	9	39	738 lb.
	Total Number of Samples						941	65	1,006	

Parcels containing seeds received from Parcel Post for examination, 251.

* Clusters. † Proposed standards of germination.

NOTE.—Where it was found that the seeds examined did not come up to the standard prescribed they were either returned to the country of origin or destroyed.

LUCERNE SEED.

During the last year lucerne seed has been in short supply in Australia, hence it has been necessary to obtain supplies from New Zealand.

Under the Commerce (Imports) Regulations it is provided that all lucerne seed entering Australia from overseas shall have one-tenth of the seed stained red, the object being to protect the buyer against having foreign-grown lucerne seed sold to him as Australian grown. A quantity of such seed has appeared upon the Queensland market this season.

CANADIAN WONDER BEANS.

Queensland is entirely dependent upon outside sources of supply for seed beans. For the current season it was found necessary to take exceptional steps involving the examination of each bag of Canadian Wonder Beans received at the Port of Brisbane from overseas or being offered for sale by local seed vendors, with the result that owing to faulty germination, 20 per cent. of the bags presented for admission have either been destroyed by incineration or returned to the country of origin. In addition 35 per cent. of the samples obtained from seed beans offered for sale in Brisbane were found to be low in germination value; therefore the sale of same was stopped, and the beans ground for feeding purposes. In all 328 bags of Canadian Wonder beans were involved. Trial plots of various Canadian Wonder beans have been sown in the field for observation purposes.

The lowest germination recorded for Canadian Wonder beans was nil per cent., while the averages of those that failed to reach the required standard as will be seen from the tables are 39 and 53 per cent.

The sowing of beans with such a low germinative capacity would mean a serious loss in the resultant crop when it is borne in mind that soil germination of beans has repeatedly proved to be considerably lower than the laboratory tests, such discrepancy increasing as the germination is lowered.

GERMINATING CAPACITY OF THE PRINCIPAL SEEDS EXAMINED DURING 1934–35 FOR PURPOSES OF THE PURE SEEDS ACTS.

Kind of Seed.	GERMINATION.					NUMBER OF SAMPLES.			
	Highest recorded during 1934-1935.	Percentage prescribed by the Regulations.	Average of samples up to standard.	Average of samples below standard.	Lowest recorded during 1934-1935.	Up to standard.	Below standard.	Number of Samples that contained prohibited weed seeds or diseased or insect infested seeds.	Total number of samples examined.
Agricultural Seeds.	%	%	%	%	%				
Barley—									
Cape and Malting	96	85	88	52	1	10	6	..	16
Skinless	97	85	91	76	72	6	2	..	8
Beans—Mauritius	95	60	95	..	95	1	..	..	1
Clovers—									
Red or Broad-leaved (*Trifolium pratense*)	97	†75	97	..	97	2	..	..	2
Subterranean (*Trifolium subterraneum*)	85	†70	77	..	70	2	..	..	2
White (*Trifolium repens*)	90	†70	90	..	90	1	..	..	1
Stylosanthes sundiaca	47	†40	47	..	47	1	..	..	1
Cotton	..	70	..	1	1	..	1	..	1
Cowpeas	93	65	82	37	11	15	6	..	21
Cowpeas (average percentage of hard seeds not included in germination)	..	..	6	3	..	..	..	..	..
Grasses—									
Canary (*Phalaris canariensis*) Annual	97	70	88	55	54	25	5	..	30
Couch (*Cynodon dactylon*)	87	30	82	..	80	10	..	..	10
Molasses (*Melinis minutiflora*)	40	†20	32	..	20	4	..	..	4
Panicum antidotale	31	†40	31	..	31	1	..	..	1
Paspalum dilatatum	69	20	35	6	Nil	35	17	..	52
Prairie (*Bromus unioloides*)	96	50	90	27	Nil	14	5	..	19
Phalaris tuberosa (Perennial)	75	†55	65	..	56	2	..	..	2
Rhodes (*Chloris gayana*)	79	30	45	14	Nil	46	22	..	68
Rye Grasses—									
Perennial	80	60	80	..	80	2	..	..	2
Annual	89	60	87	..	85	3	..	..	3
Lucerne	94	65	84	..	68	29	..	..	29
Lucerne (average percentage of hard seeds not included in germination)	..	..	5	..	..	..	..	..	..
Maize	98	85	92	77	66	23	8	..	31
Millets—									
Foxtail (*Setaria italica*)	98	70	94	45	45	11	1	..	12
Japanese (*Echinochloa crus-galli*, var. *edulis*, Syn. *Panicum crus-galli*)	96	70	88	62	62	12	1	..	13
White Panicum (*Echinochloa frumentacea*, Syn. *Panicum frumentaceum*)	97	70	90	..	84	12	..	..	12
French Millet (*Panicum miliaceum*)	93	70	91	66	66	2	1	..	3
Oats	99	80	92	..	81	32	..	..	32
Peas, Field (*Pisum arvense*)	97	75	97	..	97	1	..	..	1
Rape	98	70	98	..	98	1	..	..	1
Rye	..	80	..	32	32	..	1	..	1
Sorghum vulgare	96	70	86	56	52	13	3	..	16
Sudan Grass (*Sorghum Sudanense*)	95	70	85	66	8	43	2	3	48
Tobacco	96	55	83	..	63	16	..	..	16
Wheat	87	85	87	..	87	1	..	..	1
Peanuts	97	†60	79	56	39	34	18	..	52
Vegetable Seeds.									
Beans, French	99	75	85	39	Nil	115	63	..	178
Beet	*74	*55	*74	*40	*40	1	1	..	2
Cabbage	80	65	75	32	Nil	11	23	..	34
Carrot	81	55	81	12	12	1	1	..	2
Cauliflower	..	60	..	53	53	..	1	..	1
Cucumber	93	65	86	56	56	2	2	..	4
Kohl Rabi	..	†60	..	1	1	..	1	..	1
Lettuce	..	65	..	1	1	..	1	..	1
Onion	88	60	88	7	Nil	1	8	..	9
Peas, Garden (*Pisum sativum*)	98	75	94	..	86	5	..	..	5
Pumpkin	94	65	94	..	94	1	..	..	1
Rock Melon	89	65	83	..	67	2	..	..	2
Tomato	94	65	94	58	58	1	1	..	2
Turnip	76	65	76	..	76	1	..	..	1
Water Melon	92	60	..	..	79	3	..	..	3
Total Number of Samples	..	..	..	..	..	..	..	..	758

* Clusters. † Proposed standards of germination.

PANICUM MAXIMUM (GUINEA GRASS).

Two samples of this grass seed were received for germination tests, and after considerable work by various methods the final germination was 2 per cent.—the usual results found with this seed. An examination of the seeds reveals that very few indeed contain any caryopses, therefore they cannot be expected to germinate.

CABBAGE SEED.

Owing to faulty germination it was necessary to order the withdrawal from sale of cabbage seed to the total weight of 38 lb. from one seed vendor alone. This seed was subsequently destroyed.

Stock Foods Acts, 1934-1935.

The following table sets out particulars relative to the operations of the Acts from 1st July, 1934, to 30th June, 1935:—

—	July to December, 1934.	January to June, 1935.	Twelve Months' Total.
Registrations effected ..	15	167	182
Registrations pending ..	..	13	13
Samples received from—			
Dealers	6	10	16
Buyers	7	2	9
Inspectors	12	10	22
Government departments	6	8	14

Samples examined representing seeds imported from overseas for feeding purposes only:—

Kind of Seed.	Imported from	Number of Samples.
Hemp	Japan, Manchuria ..	9
Maw	Holland	1
Red French Millet ..	Japan	5
Red and White French Millet	Japan	3
Rape	Japan	4
Turnip	New Zealand ..	1

All the above consignments were found to comply with the requirements of the Stock Foods Acts, therefore they were admitted.

The importations of red French millet totalled 51 bags, and mixed red and white French millet totalled 168 bags. An effort is being made to grow our own requirements of red French millet on the Darling Downs; if this meets with success there should be no reason for importation of red French millet seed.

Amending Regulations.

On 20th December, 1934, amending Regulations were gazetted, the main points of alteration being:—

(*a*) The introduction of a standard sieve system.

(*b*) In order to clarify the original intention of the amending Act it was definitely stated that when phosphoric acid (P_2O_5), lime (CaO), magnesia (MgO), iron (Fe) and/or sulphur (S) is present in more than one form the respective minimum percentages of phosphoric acid, lime, magnesia, iron and/or sulphur shall be declared.

(*c*) The statutory declaration form was simplified and brought up to date.

The chief interest under this Act during the current year has centralised around the quality of hay supplied for starving stock. While a large portion has been of good quality, I regret to say that a portion has been of very poor quality. Considerable publicity has been given in the daily press to this matter. One paper in particular, not only drew the public's attention to this but repeatedly reported the matter in such a way as to render considerable help in suppressing the malpractices.

Inspection would necessitate each bale or bag being opened up, and after examination again closed, which makes it impracticable, except when material is being made up or opened by the final purchaser for use.

Such inspection was long ago tried out in the U.S.A. and had to be abandoned, except where specially asked for and a deposit paid to cover unloading, opening, closing and reloading; such deposit was demanded before the inspection was carried out. The cost proved to be prohibitive.

It appears that the bulk—maybe 90 per cent. or over—of the hay and chaff being sold for consumption in Western Queensland, is sold at senders' stations, situated chiefly between Ipswich and Helidon, and on the Darling Downs. Comparatively little is sold in Roma Street. Freight charges are saved by selling and buying where the material is loaded.

Complaints have been made that in some cases hay or chaff that has been offered for sale in various centres has been baled or bagged in such a manner as to conceal its true quality—or in other words it has been "topped."

Inferior hay, wood, earth and even stones have been added, there is also the question of battens, some of which have been found that could better be described as logs.

Under the regulation dealing with hay, chaff and straw, the following are totally prohibited:—

(*a*) Plants, parts of plants, and seeds of *Agrostemma Githago* (Corn Cockle), *Alternanthera repens* (Khaki weed), *Argemone mexicana* (Prickly Poppy), *Cuscuta* spp. (Dodder), *Datura* (Thorn Apple), *Papaver* spp. (Poppy), *Ricinus communis* (Castor Oil Plant), *Xanthium pungens* (Noogoora burr), *Xanthium spinosum* (Bathurst burr).

(*b*) *Claviceps purpurea* (Ergot).

Any substance of whatever character in itself deleterious to the life or health of stock.

Any substance of whatever character added for the purpose of fraudulently increasing the weight of the stock food.

In the case of *Tilletia tritici* (Bunt) and *Ustilago* spp. (Smut), not more than 0·1 per cent. by weight may be present.

Moisture.—Not more than 12 per cent. by weight is allowed, unless the actual amount is declared on the invoice.

When the quantity of hay, chaff or straw other than the kind named in the invoice exceeds 10 per cent. in weight, the actual amount must be declared on the invoice.

Battens.—The total weight of battens on one bale or package shall not exceed 10 per cent. of the gross weight of such bale or package.

The requirements of this Regulation are met with providing the total number of battens per bale does not exceed eight in number, and each such batten is not of greater length than the bale, and is not more than 3 inches wide by $\frac{5}{8}$ inches thick. The necessary action to enforce this Regulation has been taken.

On the other hand, buyers of chaff, hay, and other fodders often do not take sufficient care in stating the quality of material required. Unfortunately price is usually considered before quality.

Buyers of hay, when they find they have cause for complaint should, in their own interests, at once communicate with this Department setting out the full facts in order that their complaints may be investigated.

STOCK FOODS, 1935.

Straight Meals Purporting to Comply with Section Three of the Stock Foods Acts.

Figures in *italics* set out the seller's guarantee.

Sold under Name of—	Crude Protein.	Crude Fat.	Maximum Crude Fibre.	Maximum Salt.	Composition as Declared by Seller.	Queensland Wholesale Dealer.
	%	%	%	%		
Barley Meal—						
Barley Meal	*11·0*	*1·0*	*6·0*	..	Barley	Denhams Pty., Ltd., Roma Street, Brisbane
Red Comb Barley Meal	*10·0*	*2·0*	*6·3*	..	Barley	Poultry Farmers' Co-op. Society, Ltd., Roma Street, Brisbane
Blood Meal—						
Moreton Dried Blood	*75·0*	..	..	..	Dried Blood	Thomas Borthwick and Sons (Australasia) Ltd., Parbury House, Eagle Street, Brisbane
Taylor's Champion Dried Blood	*76·0*	..	..	..	Dried Blood	Charles Taylor and Co., 126–128 Roma Street, Brisbane
Bone Meal (*see* Phosphates).						
Bran—						
Bran	*15·5*	*3·0*	*9·0*	..	Wheat	Barnes and Co., Pty., Ltd., Stanley Street, South Brisbane
Bran	*13·5*	*2·3*	*12·0*	..	Wheat	Barnes and Co., Pty., Ltd., Palmerin Street, Warwick
Bran	*14·7*	*2·6*	*11·0*	..	Wheat	Brisbane Milling Co., Pty., Ltd., Stanley Street, South Brisbane
Bran	*16·0*	*2·5*	*11·0*	..	Wheat	Dalby Milling Co., Pty., Ltd., Dalby
Bran	*15·0*	*2·0*	*11·0*	..	Wheat	Defiance Milling Co., Ruthven Street, Toowoomba
Bran (Roma)	*15·0*	*2·5*	*12·0*	..	Wheat	Dominion Milling Co., Pty., Ltd., Stanley Street, South Brisbane
Bran (Toowoomba and Maryborough)	*14·7*	*2·7*	*11·0*	..	Wheat	ditto
Bran (Brunton's)	*14·0*	*2·5*	*10·0*	..	Wheat	P. A. Emanuel, Rainbow Street, Sandgate, Queensland
Bran	*14·0*	*2·5*	*12·0*	..	Wheat	Gillespie Bros. (Queensland) Pty., Ltd., Albion, Brisbane
Bran (New South Wales Flour Millers)	*14·0*	*2·5*	*10·0*	..	Wheat	W. Johnson and Markwell, 34 Roma Street, Brisbane
Buttermilk—						
Jacaranda P.D.B. Dried Buttermilk Powder	*35·0*	*4·0*	..	..	Buttermilk	Queensland Farmers' Co-op. Association, Ltd., Booval
Red Comb Buttermilk Protein	*68·0*	*10·0*	..	..	Buttermilk	Poultry Farmers' Co-op. Society, Ltd., Roma Street, Brisbane
Coconut Meal and Cake—						
Apollo Meal	*17·0*	*6·5*	*10·0*	*1·0*	Coconut	J. Kitchen and Sons, Pty., Ltd., Edmonstone Road, Newstead, Brisbane
Eta Brand Coconut Meal	*19·0*	*7·0*	*9·0*	..	Coconut	Denhams Pty., Ltd., Roma Street, Brisbane
Key Coconut Meal	*19·0*	*6·0*	*11·0*	*1·0*	Coconut	Lever Bros., Ltd., 20–22 Charlotte Street, Brisbane
Oil Cake	*17·0*	*6·5*	*10·0*	*1·0*	Coconut	J. Kitchen and Sons, Pty., Ltd., Edmonstone Road, Newstead, Brisbane
Sunlight Oil Cake	*16·5*	*9·0*	*11·0*	*1·0*	Coconut	Lever Bros., Ltd., 20–22 Charlotte Street Brisbane

STOCK FOODS, 1935—*continued.*

STRAIGHT MEALS PURPORTING TO COMPLY WITH SECTION THREE OF THE STOCK FOODS ACTS—*continued.*

Figures in *italics* set out the seller's guarantee.

Sold under Name of—	Crude Protein.	Crude Fat.	Maximum Crude Fibre.	Maximum Salt.	Composition as Declared by Seller.	Queensland Wholesale Dealer.
	%	%	%	%		
Cotton Seed Meal—						
Bacal Decorticated Cotton Seed Meal	*40·0*	*6·0*	*15·0*	..	Decorticated Cotton Seed	Queensland Cotton Board, Eagle Farm Road, Whinstanes, Brisbane
Bacal Cotton Seed Meal	*35·0*	*5·0*	*20·0*	..	Decorticated Cotton Seed Meal and 15 per cent. added Cotton Seed Hull Bran	Queensland Cotton Board, Eagle Farm Road, Whinstanes, Brisbane
Hibiscus Special Grade Cotton Seed Oil Meal	*35·0*	*5·0*	*20·0*	..	Decorticated Cotton Seed Meal and 15 per cent. added Cotton Seed Hull Bran	Queensland Pastoral Supplies, Pty., Ltd., Bowen Street, Brisbane
B.C.C. Cotton Seed Oil Meal ..	*25·0*	*4·0*	*30·0*	..	Decorticated Cotton Seed Meal and 40 per cent. added Cotton Seed Hull Bran	Brisbane Cotton Seed Stock Foods Co., Bowen Street, Brisbane
Hibiscus Cotton Seed Oil Meal ..	*25·0*	*4·0*	*30·0*	..	Decorticated Cotton Seed Meal and 40 per cent. added Cotton Seed Hull Bran	Queensland Pastoral Supplies, Pty., Ltd., Bowen Street, Brisbane
Di-Calcium Phosphate (*See* PHOSPHATES).						
Fish Oil—						
Cod Oil	..	..	..	..	Cod Oil	J. Irving and Sons, London Works, Mayne, Brisbane
Linseed Oil Meal and Nuts—						
Barnes Linseed Meal	*26·0*	*8·0*	*12·0*	..	Linseed	E. J. Lowis, Queen Street, Brisbane
Halmeg Linseed Oil Meal ..	*26·0*	*0·6*	*15·0*	..	Linseed	Denhams Pty., Ltd., Roma Street, Brisbane
Meggitt's Linseed Oil Meal ..	*27·0*	*6·0*	*13·0*	..	Linseed	Gollin and Co., Pty., Ltd., Eagle Street, Brisbane
Meggitt's Linseed Kibbled Nuts..	*27·0*	*6·0*	*13·0*	..	Linseed	ditto
Meggitt's Linseed Sheep Nuts ..	*27·0*	*6·0*	*13·0*	..	Linseed	ditto
Lucerne Meal—						
Denham's Lucerne Meal	*15·0*	*1·2*	*30·0*	..	Lucerne	Denhams Pty., Ltd., Roma Street, Brisbane
Red Comb Lucerne Meal ..	*15·0*	*1·2*	*30·0*	..	Lucerne	Poultry Farmers' Co-op. Society, Ltd., Roma Street, Brisbane
Maize Meal—						
Maize Meal	*9·5*	*3·8*	*3·0*	..	Maize	Henry Dean and Sons, Pty., Ltd., Roma Street, Brisbane
Maize Meal	*9·5*	*3·5*	*4·0*	..	Maize	Denhams Pty., Ltd., Roma Street, Brisbane
Red Comb Maize Meal	*10·0*	*3·5*	*3·5*	..	Maize	Poultry Farmers' Co-op. Society, Ltd., Roma Street, Brisbane
Meat Meals, Meat and Bone Meals, and Protein Meals—						
Borthwick's Mebo Meal	*54·0*	*10·0*	..	..	Meat, Bone, and Dried Blood	T. Borthwick and Sons (Australasia) Ltd. Parbury House, Eagle Street, Brisbane
Borthwick's Protein Meal ..	*52·0*	*10·0*	..	..	Meat, Bone, and Dried Blood	ditto
Meat Meal	*65·0*	*13·0*	..	*4·0*	Meat	Queensland Meat Industry Board, Brisbane Abattoirs, Cannon Hill, Brisbane
Protein Meal	*66·0*	*10·0*	..	*4·0*	Meat and Bone	ditto
Red Comb Protein Meal No. 1 ..	*65·0*	*18·0*	..	..	Extract and Residue of Meat	Poultry Farmers' Co-op. Society, Ltd., Roma Street, Brisbane
Red Comb Protein Meal No. 2 ..	*68·0*	*8·0*	..	..	Extract and Residue of Meat and Bone..	ditto

Sold under Name of—	Phosphoric Acid (P_2O_5) as— Bone.	Dicalcic Phosphate.	Nauru Phosphate.	Crude Protein.	Through 14 inch.	Through 1/16 inch.	Through 1/8 inch.	Composition as Declared by Seller.	Queensland Wholesale Dealer.
	%	%	%	%	%	%	%		
PHOSPHATES—									
Bone Meal Sterilised—									
A.C.F. Sterilised Bone Meal..	*24·0*	..	..	*22·0*	..	..	*95*	Sterilised Bone	A. C. F. and Shirley's Fertilizers, Ltd., Little Roma Street, Brisbane
Borthwick's Ground Green Bone for Poultry	*19·0*	..	..	*34·0*	..	..	..	Bone and Meat, contains 7 per cent. Crude Fat	T. Borthwick and Sons (Australasia) Ltd., Parbury House, Eagle Street, Brisbane
Borthwick's Sterilised Bone Meal	*24·0*	..	..	*24·0*	..	..	*95*	Sterilised Bones	ditto
Calphos Sterilised Bone Flour	*25·0*	..	..	*15·0*	..	..	*95*	Sterilised Bone Flour	Queensland Meat Industry Board, Brisbane Abattoirs, Cannon Hill, Brisbane
Tri-Cal-Os Sterilised Bone Flour	*30·0*	..	..	*5·0*	..	..	*95*	Sterilised Bone Flour	Glues and By-products Pty., Ltd., 459 Adelaide Street, Brisbane
Di-Calcium Phosphate—									
Commonwealth Di-Calcic Phosphate	..	*38·0*	..	..	*90*	..	..	Di-Calcic Phosphate	A.C.F. and Shirley's Fertilizers, Ltd., Little Roma Street, Brisbane
Nauru Phosphate—									
Finely Ground Nauru Phosphate S.C.	..	..	*37·0*	..	..	*95*	..	Finely Ground Nauru Phosphate	Gibbs, Bright, and Co., Queen Street, Brisbane
Shirley's Finely Ground Nauru Phosphate Rock	..	..	*37·0*	..	..	*95*	..	Finely Ground Nauru Phosphate Rock	A.C.F. and Shirley's Fertilizers, Ltd., Little Roma Street, Brisbane

STOCK FOODS, 1935—*continued.*

STRAIGHT MEALS PURPORTING TO COMPLY WITH SECTION THREE OF THE STOCK FOODS ACTS—*continued.*

Figures in *italics* set out the seller's guarantee.

Sold under Name of—	Crude Protein.	Crude Fat.	Maximum Crude Fibre.	Maximum Salt.	Composition as Declared by Seller.	Queensland Wholesale Dealer.
	%	%	%	%		
Pollard—						
Pollard	*14·3*	*3·2*	*7·0*	..	Wheat	Barnes and Co., Pty., Ltd., Stanley Street, South Brisbane
Pollard	*14·0*	*3·2*	*7·0*	..	Wheat	Barnes and Co., Pty., Ltd., Palmerin Street, Warwick
Pollard	*13·0*	*2·5*	*10·0*	..	Wheat	The Brisbane Milling Co., Pty., Ltd., Stanley Street, South Brisbane
Pollard	*16·5*	*3·5*	*7·0*	..	Wheat	Dalby Milling Co., Pty., Ltd., Dalby
Pollard	*15·0*	*3·0*	*7·0*	..	Wheat	Defiance Milling Co., Ruthven Street, Toowoomba
Pollard (Toowoomba, Maryborough, and Roma)	*14·5*	*2·3*	*8·0*	..	Wheat	The Dominion Milling Co., Pty., Ltd., Stanley Street, South Brisbane
Pollard (Brunton's)	*14·0*	*3·0*	*7·0*	..	Wheat	P. A. Emanuel, Rainbow Street, Sandgate, Queensland
Pollard	*14·3*	*3·2*	*7·0*	..	Wheat	Gillespie Bros. (Queensland), Pty., Ltd., Albion, Brisbane
Pollard (New South Wales Flour Millers)	*14·0*	*3·0*	*7·0*	..	Wheat	W. Johnson and Markwell, 34 Roma Street, Brisbane
Rice Meal—						
Double J Rice Meal	*12·0*	*14·7*	*8·5*	..	Rice	J. Jackson and Co. (Produce and Seeds), Pty., Ltd., 266 Roma Street, Brisbane
Harper's Star Rice Meal	*11·0*	*11·0*	*8·0*	..	Rice	Robert Harper and Co., Ltd., Albert and Mary Streets, Brisbane
Rock Phosphates (*see* Phosphates).						
Wheat Meal—						
Red Comb Wheat Meal	*10·2*	*1·5*	*3·5*	..	Wheat	Poultry Farmers' Co-op. Society, Ltd., Roma Street, Brisbane
Wheat Meal	*13·0*	*1·4*	*3·0*	..	Wheat	Denhams Ltd., Roma Street, Brisbane
Wheat Meal	*12·5*	*1·8*	*3·0*	..	Wheat	Queensland Wheat Board, Margaret Street, Toowoomba

MIXED, CONCENTRATED OR PREPARED STOCK FOODS, PURPORTING TO COMPLY WITH SECTION THREE OF THE STOCK FOODS ACTS.

Figures in *italics* set out the seller's guarantee.

Sold under Name of—	Crude Protein.	Crude Fat.	Maximum Crude Fibre.	Maximum Salt.	Composition as Declared by Seller.	Queensland Wholesale Dealer.
	%	%	%	%		
Calf Foods—						
Denham's Calf Food	*15·0*	*5·0*	*7·0*	..	Wheat Meal, Pollard, Oat Meal, Barley Meal, Maize Meal, Linseed Meal, Dried Blood, Aniseed Oil, Cod Oil	Denhams Pty., Ltd., Roma Street, Brisbane
Farmer's Calf Food	*22·6*	*5·2*	*5·0*	..	Milk Solids, Pollard, Linseed Meal, with 0·5 per cent. of Whiting, flavoured with Aniseed	Queensland Farmers' Co-op. Association, Ltd., Booval
Hibiscus Calf Food	*20·0*	*4·5*	*6·0*	*0·5*	Maize, Linseed, Cotton Seed, and Bone Meals, Pollard, Skim Milk Powder, Salt	Queensland Pastoral Supplies, Pty., Ltd., Bowen Street, Brisbane
McCartney's Calf Food	*14·0*	*2·5*	*5·0*	*0·7*	Bran, Pollard, Wheat, Lucerne, Linseed, Coconut, Bone Meals, Borthwicks' Mebo Meal, and Bonolik containing Limestone, Sulphur, Iron, Iodine, Salt	McCartney and Sons, Stanley Street, Woolloongabba, Brisbane
Nooma Calf Food	*12·3*	*4·3*	*2·8*	*0·5*	Linseed, Wheat, Maize, Barley, Pollard, Whiting, Aniseed Oil, Cinnamon, Fine Salt	Siemons Pty., Ltd., 86–94 Roma Street, Brisbane
Parson's Calf Food	*13·0*	*18·5*	*4·2*	..	Rice, Oats, Barley, Pollard, Corn Gluten and Germ Meal, Wheat Meal, and Crushed Linseed	Parsons Bros. and Co., Pty., Ltd., 95–97 Elizabeth Street, Brisbane
Red Comb Calf Food	*18·0*	*4·0*	*5·5*	*0·5*	Bran, Wheatmeal, Linseed, Maize, Meat and Bone Meals, Buttermilk, Cod Liver Oil, Ground Sulphur, Iron Sulphate, Epsom Salts, Lime, ½-oz. Potassium Iodide to the ton	Poultry Farmers' Co-op. Society, Ltd., Roma Street, Brisbane
Harper's Star Brand Calf Food	*12·0*	*10·0*	*7·5*	..	Linseed, Maize, Oat Meal, Rice, and Barley	Robert Harper and Co., Ltd., Albert and Mary Streets, Brisbane
Dog Foods—						
Thorpe's Meat Cakettes for Dogs	*25·0*	*3·0*	*4·0*	*1·0*	Meat Meal, Milk Powder, Malted Wheat, Biscuit Meal, Lucerne Leaf Meal, Animal Charcoal, Molasses, Calcium Phosphate, Cod Liver Oil, and Salt	Cramsie, Dwyer, and Co., Wallangarra
Thorpe's Meat Extract Dog Biscuits	*10·0*	*3·0*	*5·0*	*1·0*	Wheat Flour, Sharps, Pollard, Fine Wheat Meal, Cod Liver Oil, Meat Meal, Salt	ditto
Thorpe's Meat Pellets for Puppies	*25·0*	*3·0*	*4·0*	*1·0*	Meat Meal, Milk Powder, Malted Wheat, Biscuit Meal, Lucerne Leaf Meal, Animal Charcoal, Molasses, Calcium Phosphate, Cod Liver Oil, Salt	ditto
Pig Foods—						
Hibiscus Pig Food	*19·0*	*4·0*	*5·0*	*1·0*	Maize, Decorticated Cotton Seed Meal, Meat Meal, Sterilised Bone Meal, Salt	Queensland Pastoral Supplies, Pty., Ltd., Bowen Street, Brisbane
Osmond's Codlivine for Pigs	*18·0*	*16·0*	*8·0*	..	Rice, Locust Beans, Linseed By-products, Peanut Meal, Fenugreek, Cod Liver Oil, Peas, Liquorice Root, Black Antimony, Soda Bicarbonate, Flowers of Sulphur	T. W. Moss and Co., 121 Eagle Street, Brisbane
Red Comb Pig Food	*13·7*	*2·0*	*5·4*	*5·0*	Barley Meal, Meat and Bone Meals, Cod Oil, Lucerne, Charcoal, Ground Sulphur, Iron Sulphate, Epsom Salts, Salt, Lime, 1 oz. Potassium Iodide to the ton	Poultry Farmers' Co-op. Society, Ltd., Roma Street, Brisbane

MIXED, CONCENTRATED OR PREPARED STOCK FOODS, PURPORTING TO COMPLY WITH SECTION THREE OF THE STOCK FOODS ACTS—*continued.*

Figures in *italics* set out the seller's guarantee.

Sold under Name of—	Crude Protein.	Crude Fat.	Maximum Crude Fibre.	Maximum Salt.	Composition as Declared by Seller.	Queensland Wholesale Dealer.
	%	%	%	%		
Sheep Cubes—						
Bacal Compound Sheep Cubes ..	*30·0*	*3·0*	*15·0*	*5·0*	Decorticated Cotton Seed Meal, 15 per cent. added Cotton Seed Hull Bran, 10 per cent. Molasses, Salt	Queensland Cotton Board, Eagle Farm Road, Whinstanes, Brisbane
Thorpe's Blood Compound Cubes for Sheep	*45·0*	*3·0*	*7·0*	*1·0*	Blood Meal, Meat Meal, Linseed, Peanut, Coconut Oil Meals, Bone Flour, Molasses, and Salt	Cramsie, Dwyer, and Co., Wallangarra
Thorpe's Kubettes for Sheep ..	*16·0*	*4·0*	*10·0*	*1·0*	Blood Meal, Meat Meal, Linseed, Peanut, Coconut Oil Meals, Wheat, Barley and Maize Meals, Gluten Meal, Bone Flour, Bran, Pollard, Molasses, and Salt	ditto
See also Linseed Oil Meal and Nuts.						
Various Stock Foods—						
McCartney's Dairy Food ..	*17·0*	*3·3*	*6·0*	*0·7*	Bran, Pollard, Coconut, Wheat, Maize, Linseed, Cotton Seed, and Bone Meals, Borthwick's Mebo Meal and Bonolik, containing Bone Meal, Limestone, Sulphur, Iron, Iodine, and Salt	McCartney and Sons, Stanley Street, Woolloongabba, Brisbane
Osmond's Codlivine for all Stock	*17·0*	*17·0*	*8·0*	..	Rice, Locust Beans, Linseed By-products, Peanut Meal, Fenugreek, Carraway, Cod Liver Oil, Peas, Liquorice Root, Soda Bicarbonate, Colouring Matter	T. W. Moss and Co., 121 Eagle Street, Brisbane
Red Comb Dairy Food	*17·3*	*3·1*	*8·5*	*1·0*	Pollard, Bran, Barley, Linseed, Meat, and Bone Meals, Buttermilk, Ground Sulphur, Iron, Epsom Salts, Lime, and Potassium Iodide 2 oz. to the ton, Sulphate of Iron, Slaked Lime, and Salt	Poultry Farmers' Co-op. Society, Ltd., Roma Street, Brisbane
Chick Foods—						
Chicken Mixture	*13·0*	*2·5*	*5·0*	..	Maize, Wheat, Peas, Barley, Oats ..	Addis Bros., 246–248 Roma Street, Brisbane
Denham's Chick Food	*14·0*	*2·0*	*4·5*	..	Wheat Kibbled, Maize Kibbled, Peas Kibbled, Rolled Oats, and Maize By-products	Denhams Pty., Ltd., Roma Street, Brisbane
Extra Special Chick Food ..	*11·5*	*2·5*	*6·0*	..	Wheat, Peas, Maize, Barley, Millet, Oats..	Siemons Pty., Ltd., 86–94 Roma Street, Brisbane
Hy-O-Vite Chicken Mash ..	*18·0*	*4·0*	*5·0*	*0·5*	Pollard, Bran, Maize Meal, Wheat Meal, Linseed Meal, Dried Buttermilk, Meat Meal, Charcoal, Sulphur, Cod Liver Oil, and Salt	Denhams Pty., Ltd., Roma Street, Brisbane
Hypro Chicken Mash	*19·0*	*3·5*	*3·0*	*0·5*	Maize Meal, Wheat Meal, Dried Buttermilk, Meat Meal, Bone Meal, Bran, Cod Liver Oil, Charcoal, Salt	Poultry Farmers' Co-op. Society, Ltd., Roma Street, Brisbane
McCartney's Special Chick Food	*12·5*	*3·8*	*6·0*	..	Maize, Oats, Wheat, Linseed and Pea Meals, Millet Seeds	McCartney and Sons, Stanley Street, Woolloongabba, Brisbane
Parson's Chicken Food	*11·0*	*2·5*	*3·5*	..	Maize, Oats, Wheat, Pea Meals, Millet Seeds	Parsons Bros. and Co., Pty., Ltd., 95–97 Elizabeth Street, Brisbane
†Red Comb Chick Feed	..	..	..	..	Oats, Wheat, Maize, Peas	Poultry Farmers' Co-op. Society, Ltd., Roma Street, Brisbane
Sure Health Chick Feed	*11·0*	*1·5*	*5·2*	..	Wheat, Maize, Sorghums, Oats, Peas, Japanese Millet	C. Bowdler, Russell Street, Toowoomba
†Taylor's Champion Chicken Mixture	..	..	..	..	Kibbled Maize, Kibbled Wheat, Kibbled Peas, Rolled Oats	Charles Taylor, and Co., 126–128 Roma Street, Brisbane
Thorpe's Extra Special Chick Food	*11·0*	*2·0*	*5·0*	..	Kibbled Wheat, Maize, Peas, Rolled Oats, Biscuit Grit made from Wheat Products. Meat and Bone Meals	Cramsie, Dwyer, and Co., Wallangarra
Growing Mashes—						
Chook Growing Mash	*18·0*	*3·0*	*9·0*	*1·0*	Bran, Pollard, Maize, Lucerne, Linseed, Wheat, Meat, and Bone Meals, Buttermilk, Sulphur Charcoal, Iron Sulphate, Salt, Cod Liver Oil	Queensland Stock and Poultry Foods, Ltd., Roma Street, Brisbane
Denham's Growing Mash.. ..	*18·0*	*4·5*	*6·0*	*1·0*	Wheat Meal, Bran, Pollard, Barley Meal, Rice Meal, Maize Meal, Linseed Meal, Peanut Meal, Dried Buttermilk, Meat, Bone, and Blood Meal, Maize By-products, Salt, Sulphur	Denhams Pty., Ltd., Roma Street, Brisbane
Double J Growing Mash	*16·0*	*4·0*	*6·0*	..	Bran, Pollard, Maize, Barley, Pea, Wheat, Linseed, Meat and Bone Meals, Buttermilk, Charcoal, and Salt	J. Jackson and Co. (Produce and Seeds), Pty., Ltd., Roma Street, Brisbane
Growing Mash	*18·0*	*4·0*	*5·0*	*4·0*	Bran, Pollard, Maize Meal, Meat Meal, Dried Buttermilk, Cod Liver Oil, Bone Meal, Salt	Addis Bros., 246 Roma Street, Brisbane
Growing Mash	*15·0*	*4·5*	*5·0*	*1·5*	Barley Meal, Bran, Pollard, Meat Meal, Linseed Meal, Charcoal, Shell Grit, Salt, Flowers of Sulphur	Siemons Pty., Ltd., 86–94 Roma Street Brisbane
H.D.S. Brand Growing Mash ..	*18·0*	*3·0*	*9·0*	*1·0*	Bran, Pollard, Maize, Lucerne, Linseed, Wheat, Meat and Bone Meals, Buttermilk, Sulphur, Charcoal, Iron Sulphate, Salt, Cod Liver Oil	Henry Dean and Sons, Pty., Ltd., Roma Street, Brisbane
Non-Stop Growing Mash ..	*17·0*	*2·0*	*6·0*	*0·7*	Oat Meal, Dried Buttermilk, Wheat Meal, Pollard, Bran, Maize Meal, Lucerne Meal, Linseed Meal, Charcoal, Borthwick's Protein Meal, Bone Meal, and Borthwick's Bonolik, containing Bone meal, Limestone, Sulphur, Iron, Iodine, and Salt	McCartney and Sons, Stanley Street, Woolloongabba, Brisbane
Red Comb Growing Mash ..	*16·0*	*4·0*	*6·0*	*0·25*	Bran, Pollard, Maize, Barley, Pea, Wheat, Linseed, Meat and Bone Meals, Buttermilk, Cod Liver Oil, Salt, Charcoal	Poultry Farmers' Co-op. Society, Ltd. Roma Street, Brisbane
Sure Growth Growing Mash ..	*12·0*	*4·0*	*6·0*	*0·5*	Maize, Bran, Pollard, Meat and Bone Meal, Buttermilk Powder, Lucerne, Cod Liver Oil, Salt.	C. Bowdler, Russell Street, Toowoomba
Thorpe's Growing Mash	*15·0*	*4·0*	*9·0*	*1·0*	Bran, Pollard, Linseed, Rice, Barley, Wheat, Maize, Lucerne, Meat Meals, Bone Flour, Molasses, Sulphur, Calcium Carbonate, and Salt	Cramsie, Dwyer, and Co., Wallangarra
Laying Mashes—						
Denham's Breeders Mash ..	*17·0*	*4·7*	*8·5*	*1·5*	Wheat Meal, Barley Meal, Lucerne Meal, Bran, Pollard, Buttermilk Protein, Bone Flour, Meat Meal, Salt	Denhams Pty., Ltd., Roma Street, Brisbane
Denham's Laying Mash	*20·0*	*4·5*	*9·0*	*1·0*	Wheat Meal, Bran, Pollard, Barley Meal, Peanut Meal, Rice Meal, Maize Meal, Linseed Meal, Lucerne Meal, Dried Buttermilk, Maize By-Products, Meat and Bone and Blood Meal, Salt, Sulphur	ditto

† Foods that contain not more than 20 per cent. by weight of crushed material that will pass a 2 m.m. sieve need not be labelled in the manner prescribed for meals.

MIXED, CONCENTRATED OR PREPARED STOCK FOODS, PURPORTING TO COMPLY WITH SECTION THREE OF THE STOCK FOODS ACTS—*continued*.

Figures in *italics* set out the seller's guarantee.

Sold under Name of—	Crude Protein.	Crude Fat.	Maximum Crude Fibre.	Maximum Salt.	Composition as Declared by Seller.	Queensland Wholesale Dealer.
	%	%	%	%		
Laying Mashes—continued.						
Double J Laying Mash	*19·0*	*3·0*	*10·0*	*1·0*	Meat and Bone Meals, Bran, Pollard, Lucerne Meal, Barley and Wheat Meals, Maize Meal, Linseed Meal, and Salt	J. Jackson and Co. (Produce and Seeds), Pty., Ltd., Roma Street, Brisbane
H.D.S. Brand Laying Mash	*17·5*	*3·0*	*9·0*	*1·0*	Bran, Pollard, Maize, Lucerne, Barley, Meat and Bone Meals, Buttermilk, Sulphur, Charcoal, Iron Sulphate, Salt, Cod Liver Oil	Henry Dean and Sons, Pty., Ltd., Roma Street, Brisbane
Laying Mash	*20·0*	*3·0*	*11·0*	*1·5*	Bran, Pollard, Lucerne, Pea Meals, Meat Meals, Bone, Dried Milk, Salt	Addis Bros., 246 Roma Street, Brisbane
Laying Mash	*15·8*	*3·4*	*8·4*	*1·5*	Barley Meal, Bran, Pollard, Meat Meal, Linseed Meal, Charcoal, Shell Grit, Salt, Flowers of Sulphur	Siemons Pty., Ltd., 86–94 Roma Street, Brisbane
Moregg Laying Mash	*17·0*	*2·0*	*6·0*	*0·7*	Bran, Pollard, Maize, Lucerne Meals, Linseed Meals, Charcoal, Borthwick's Mebo Meal, Borthwick's Bomo Poultry Tonic, containing Bone Meal, Limestone, Sulphur, Iron, and Iodine, and Salt	McCartney and Sons, Stanley Street. Woolloongabba, Brisbane
Red Comb All Mash	*14·0*	*2·2*	*7·0*	*0·5*	Wheat Meal, Bran, Maize Meal, Barley, Linseed Oil, Meat, Bone, Lucerne, Charcoal, Salt	Poultry Farmers' Co-op. Society, Ltd., Roma Street, Brisbane
Red Comb Laying Mash	*17·0*	*4·0*	*9·0*	*0·5*	Bran, Pollard, Maize, Barley, Linseed, Cotton Seed, Lucerne, Meat and Bone Meals, Cod Liver Oil, Charcoal, Salt	ditto
Red Comb Nusheen Moulter's Mash	*17·0*	*3·9*	*5·9*	*0·5*	Maize, Lucerne, Wheat, Linseed, Meat and Bone Meals, Bran, Dried Buttermilk, Ground Sulphur, Iron Sulphate, Epsom Salts, Slaked Lime, Charcoal, ½-oz. Potassium Iodide to the ton	ditto
Skinner's Allegg	*38·0*	*8·0*	*7·0*	*5·0*	Meat, Bone, Blood, Cod Oil, Linseed Meal, Charcoal, Salt	ditto
Spur Laying Mash	*17·5*	*2·8*	*11·0*	*1·0*	Bran, Pollard, Lucerne Meal, Meat and Bone Meal, Salt, Sulphur, Charcoal, Iron Sulphate	Queensland Stock and Poultry Foods, 228 Roma Street, Brisbane
Sure Egg Laying Mash	*16·5*	*3·5*	*7·5*	*0·5*	Meat and Bone Meal, Fine Salt, Lucerne, Linseed Oil Meal, Bran, Pollard, Maize, Barley	C. Bowdler, Russell Street, Toowoomba
Taylor's Champion Laying Mash Mixture	*21·0*	*3·0*	*6·0*	..	Bran, Pollard, Maize Meal, Bone Meal, Linseed Oil Meal, Dried Blood, Lucerne Meal	Charles Taylor and Co., 126–128 Roma Street, Brisbane
Thorpe's All Mash	*13·0*	*4·0*	*9·0*	*1·0*	Bran, Pollard, Wheat, Oats, Maize, Barley, Lucerne Meal, Meat Meal, Bone Flour, Linseed Oil Meals, Molasses, Sulphur Calcium Carbonate, Salt	Cramsie, Dwyer, and Co., Wallangarra
Thorpe's Egglo	*40·0*	*6·0*	*5·0*	*5·0*	Meat and Blood Meals, Linseed, Peanut, and Coconut Oil Meals, Milk Powder, Bone Flour, Bone Charcoal, Cod Liver Oil, Calcium Carbonate, Salt	ditto
Thorpe's Laying Mash	*14·0*	*4·0*	*9·0*	*1·0*	Bran, Pollard, Linseed, Rice, Wheat, Barley, Maize, Lucerne and Meat Meals, Bone Flour, Molasses, Sulphur, Calcium Carbonate, Salt	ditto
X.L.N.T. Laying Mash	*16·0*	*2·8*	*11·0*	*1·0*	Bran, Pollard, Lucerne Meal, Meat, Bone, and Blood Meal, Salt	Denhams Pty., Ltd., Roma Street, Brisbane
Miscellaneous Poultry Foods—						
†Denham's Scratch Grain	..	..	..	..	Wheat, Cracked Maize, Oats, Barley, Peas	ditto
Osmond's Codlivine for Poultry	*17·0*	*17·0*	*8·0*	..	Rice, Locust Beans, Linseed By-products, Peanut Meal, Fenugreek, Carraway, Cod Liver Oil, Peas, Liquorice Root, Soda Bicarbonate, Colouring Matter	T. W. Moss and Co., 121 Eagle street, Brisbane
†Red Comb Nugrain	..	..	..	..	Oats, Wheat, Maize, Barley	Poultry Farmers' Co-op. Society, Ltd., Roma Street, Brisbane
†Taylor's Champion Grain Mixture	..	..	..	..	Maize, Wheat, Barley, Oats, Rye, Sorhgum	Charles Taylor and Co., 126–128 Roma Street, Brisbane

† Foods that contain not more than 20 per cent. by weight of crushed material that will pass a 2 m.m. sieve need not be labelled in the manner prescribed for meals.

Sold under Name of—	Composition as Declared by Seller.	Queensland Wholesale Dealer.
Bird Seeds—		
The Crescent Packing Coy's. Bird Seed	Canary, Hemp, Millet, Rape, Linseed, and a Packet of Shell Grit	R. W. Thurlow and Co., Ltd., 30–38 Wharf Street, Brisbane
Monogram Brand Mixed Bird Seed	Canary, Panicum, Millet, Linseed, Hemp, Rape, Chillies	Simpson Bros., Pty., Ltd., Ann Street, Brisbane
Nooma Bird Seed—Canary Food	Linseed, Canary, Red Millet, White Millet, Hulled Oats, Rape, Hemp, Japanese Millet, Grit	Prospect Packing Co., 94 Roma Street, Brisbane
Nooma Mixed Bird Seed	Panicum, Hulled Oats, Red and White Millet, Linseed, Hemp, Rape, Japanese Millet, Grit	ditto
Parson's Mixed Bird Seed	Chillies, Canary, Hemp, Rape, Panicum, Red and White Millets	Parsons Bros. and Co., Pty., Ltd., 95–97 Elizabeth Street, Brisbane
Pure Mixed Bird Seed	Canary, Hemp, Millet, Panicum, Linseed, Rape, Foxtail Millet, Chillies	J. F. McKenzie and Co., Pty., Ltd., Ann Street, Brisbane
Royal Blue Mixed Bird Seed	Canary, Panicum, Millets, Hemp, Rape, Linseed, Chillies, Maw, Hulled Oats	Simpson Bros., Pty., Ltd., Ann Street, Brisbane
Simpson's Canary Food	Canary, Panicum, Chillies, Hemp, Rape, Millet, Maw, Linseed, Hulled Oats, Grit	ditto
Star Brand Bird Seed	Canary, Panicum, Millet, Hemp, Rape, Linseed, Hulled Oats, Chillies	Robert Harper and Co., Ltd., Albert and Mary Streets, Brisbane
Parrot Mixtures—		
Gold Crest Parrot Food	Hulled Oats, Maize, Hemp Seed, Wheat, Chillies, Sunflower Seed, Linseed, White French Millet, Peanuts	R. M. Gow and Co., Pty., Ltd., Turbot Street, Brisbane
Nooma Parrot Seed Mixture	Hemp, Maize, Oats, Linseed, Wheat, Sunflower, Millets, Chillies, Peanuts	ditto
Simpson's Parrot Seed Mixture	Maize, Wheat, Oats, Hemp, Sunflower, Millets, Peanuts, Chillies, Linseed	Simpson Bros., Pty., Ltd., Ann Street, Brisbane
Star Brand Parrot Food	Maize, Sunflower Seed, Barley, Wheat, Oats, Buck Wheat, Millet Seeds, Peanuts, Peas, Rape Seed, Linseed, Chillies	Robert Harper and Co., Ltd., Albert and Mary Streets, Brisbane

STOCK LICKS AND MINERAL FEEDS, 1935.

Stock Licks and Mineral Feeds Purporting to Comply with Section Three of the Stock Foods Acts.

Figures in *italics* set out the seller's guarantee.

Sold under Name of—	Phosphoric Acid as— Sterilised Bone Meal.	Bone Charcoal.	Dicalcium Phosphate.	Nauru Phosphate.	Maximum Salt.	Potassium Iodide to Ton.	Composition Declared by Seller.	Queensland Wholesale Dealer.
Licks—	%	%	%	%	%	Oz.		
Acco Salt Lick	*6·2*	..	..	..	*60·0*	*33½*	Salt, Magnesium Sulphate, Sterilised Bone Meal, Soda Bi-carbonate, Sublimed Sulphur, Calcium Carbonate, Iron Sulphate, Molasses, Potassium Iodide	Australian Chemical Co., Donkin Street, South Brisbane
Aminac Concentrated Sheep Lick	*15·0*	..	*8·0*	..	..	..	Di-Calcium Phosphate, Sterilised Bone Meal, and Flavouring Matter	J. Kitchen and Sons, Pty., Ltd., Edmondstone Road, Newstead, Brisbane
Austral Medicated Stock Lick	..	..	*3·0*	*13·0*	*39·0*	*1½*	Di-Calcium Phosphate, Nauru Phosphate, Magnesium Sulphate, Flowers of Sulphur, Iron Sulphate, Cotton Seed Meal, Salt, Potassium Iodide	Taylor's, Elliott's, and Australian Drug Pty., Ltd., 154 Charlotte Street, Brisbane
Borthwick's Bomo Poultry Tonic	*12·0*	..	..	..	*35·0*	*33·6*	Sterilised Bone Meal, Lime, Salt, Powdered Sulphur, Iron, Epsom Salts, Potassium Iodide, and containing Minimum Crude Protein 12 per cent.	T. Borthwick and Sons (Australasia) Pty., Ltd., Parbury House, Eagle Street, Brisbane
Borthwick's Moreton Bonolik for Stock	*12·0*	..	..	..	*45·0*	*30·0*	Sterilised Bone Meal, Salt, Powdered Sulphur, Epsom Salts, Iron Sulphate, and containing Minimum Crude Protein 12 per cent., Potassium Iodide	ditto
Borthwick's Moreton Salbolik	*8·0*	..	..	..	*66·0*	..	Sterilised Bone Meal and Salt, and containing Minimum Crude Protein 8 per cent.	ditto
Century Medicated Cattle Lick	..	*4·5*	..	..	*78·0*	..	Salt, Ground Sulphur, Molasses, Bone Charcoal	McGlew and Co., Ryan House, Charlotte Street, Brisbane
Century Medicated Sheep Lick	..	*4·0*	..	..	*78·0*	..	Salt, Eucalyptus Oil, Ground Sulphur, Molasses, Fish Oil, Bone Charcoal	ditto
Dalco Stock Lick	*3·5*	..	..	*13·0*	*35·0*	*16*	Sterilised Bone Meal, Ground Rock Phosphate, Salt, Magnesium Sulphate, Flowers of Sulphur, Potassium Iodide, Iron Sulphate, Molasses	Dalgety and Co., Ltd., Elizabeth Street, Brisbane
Eucalick Medicated Sheep Lick	..	*4·0*	..	..	*78·0*	..	Salt, Eucalyptus Oil, Ground Sulphur, Molasses, Fish Oil, Bone Charcoal	McGlew and Co., Ryan House, Charlotte Street, Brisbane
Hamalic	*4·5*	..	*3·6*	..	*68·0*	*8*	Dicalcic Phosphate, Sterilised Bone Meal, Magnesium Sulphate, Iron Sulphate, Sublimed Sulphur, Manganese Sulphate, Salt Potassium Iodide, and Flavouring Matter	Hamilton Pty. (Queensland), Ltd., 92 Adelaide Street, Brisbane
Hibiscus Iodized Salt Block	..	..	..	..	*99·0*	*7*	Salt, Potassium Iodide	Queensland Pastoral Supplies, Pty. Ltd., Bowen Street, Brisbane
Hibiscus Sulphurized Salt Block	..	..	..	..	*97·0*	..	Salt, Sulphur	ditto
Hibiscus Special Bone Meal Lick	*11·0*	..	..	..	*48·0*	..	Coarse Salt, Sterilised Bone Meal, Sulphur, Iron Sulphate, Magnesium Sulphate, Molasses	ditto
Hibiscus Special Ewe Lick	*8·0*	..	..	..	*30·0*	..	Coarse Salt, Sterilised Bone Meal, Magnesium Sulphate, Iron Sulphate, Sulphur, Cotton Seed Meal, and Molasses	ditto
Hibiscus Stock Lick	..	..	..	*14·5*	*40·0*	..	Salt, Nauru Phosphate, Magnesium Sulphate, Iron Sulphate, Flowers of Sulphur, Molasses	ditto
Kwik-Lik	*6·0*	..	..	*8·0*	*45·0*	..	Salt, Bone Meal, Ground Rock Phosphate, Magnesium Sulphate, Flowers of Sulphur, Iron Sulphate, and Molasses	A.C.F. and Shirley's Fertilizers, Ltd., Little Roma Street, Brisbane
Lix-All Vitality Stock Lick	..	*10·0*	..	..	*52·0*	*2*	Salt, Bone Charcoal, Sublimed Sulphur, Sulphate of Iron, Epsom Salts, Molasses, Pot. Iodide, 4·2 per cent. Pollard, a By-product of Wheat	Queensland Primary Producers' Co-op. Society, Ltd., Creek Street, Brisbane
Osmond's Toneca Stock Lick	*6·0*	..	..	..	*75·0*	*14*	Salt, Sterilised Bone Meal, Magnesium Sulphate, Calcium Carbonate, Iron Sulphate, Powdered Sulphur, Potassium Iodide	T. W. Moss and Co., 121 Eagle Street, Brisbane
Pegalick (Concentrated)	*14·4*	..	..	..	*35·6*	*19*	Sterilised Bone Meal, Flowers of Sulphur, Iron Sulphate, Cupri Sulphate, Molasses, Coarse Salt, Potassium Iodide	Bryce Ltd., 134 Adelaide Street, Brisbane
Prophylactic Blue Cross Stock Lick	..	..	..	..	*85·0*	..	Salt, Sulphur, Magnesium Sulphate, Ferrous Sulphate, Sodium Bi-carbonate, Calcium Sulphate, Molasses	Dalgety and Co., Ltd., Elizabeth Street, Brisbane
Ram Stock Lick	..	..	..	..	*100·0*	..	Salt	T. McWilliam and Co., Ltd., Roma Street, Brisbane
Vic-Lic Concentrated Sheep Lick D	..	*16·8*	*11·2*	..	..	*16*	Precipitated Bone Di-calcic Phosphate, Carbo-Animalis (Bone Charcoal), Iron Limonite, Potassium Iodide, contains a Maximum of 16 per cent. of Meal—a By-product of Rice, Sodium Sulphate	Wilcox, Mofflin, Ltd., Longland Street, Newstead, Brisbane
Vic-Lic Concentrated Sheep Lick G	..	*16·8*	*11·2*	..	..	*16*	Precipitated Bone Di-Calcic Phosphate, Carbo-Animalis (Bone Charcoal), Iron Limonite, Potassium Iodide, contains a Maximum of 16 per cent. of Meal—a By-product of Rice	ditto
Victus Concentrated Iodised Mineral Supplement	..	..	*7·0*	..	..	*16*	Lime, Carbonate, Magnesia, Iron, Soda, Sulphate, Potash, Chloride, Vegetable Carbon	J. C. Ure, 244 Charlotte Street, Brisbane
Wagstaff's Medicated Stock Salt	*1·6*	..	*3·1*	*3·5*	*62·0*	*20*	Salt, Sterilised Bone Meal, Finely Ground Nauru Phosphate, Di-Calcic Phosphate, Flowers of Sulphur, Sulphate of Iron, Soda Bi-Carbonate, Molasses, Bitter Aloes, Oil of Aniseed, and 5 per cent. weight of Bran	Australian Disinfectant Co., 83–85 Albert Street, Brisbane

Fertilizers Acts, 1934-1935.

The following table sets out particulars relative to the operation of the Acts from 1st July, 1934, to 30th June, 1935:—

	July to December, 1934.	January to June, 1935.	Twelve Months Total.
Licenses—			
Issued	14	124	138
Refused	..	1	1
Registrations—			
Effected	29	235	344
Amended	..	57	
Special mixtures	..	23	
Samples received from—			
Dealers	6	17	23
Buyers	4	2	6
Inspectors	16	15	31

The labelling and branding of fertilizers is satisfactory except in the case of lime, where considerable improvement can be made.

Lime.

As the result of investigation it has been found that the labelling of lime as at present carried out is most unsatisfactory.

The main designations used, together with descriptions, are set out hereunder:—

"Lime for agricultural purposes" shall be classed as—

(1) Burnt lime, caustic lime or quicklime—consisting chiefly of lime in the form of calcium oxide (CaO); or

(2) Slaked lime, air-slaked lime, mild lime, hydrated lime—consisting chiefly of lime in the form of hydrate of lime ($Ca(OH)_2$) and/or carbonate of lime ($CaCO_3$) obtained by the slaking of burnt lime; or

(3) Processed lime—consisting of a by-product from a process—chiefly lime in the form of hydrate ($Ca(OH)_2$) and/or carbonate of lime ($CaCO_3$); or

(4) Pulverised limestone, marble, coral or shells—consisting chiefly of lime in the form of carbonate of lime ($CaCO_3$) obtained by crushing or pulverising; or

(5) Earthy lime—consisting chiefly of lime in the form of carbonate of lime ($CaCO_3$) obtained by excavation of the natural substance; or

(6) Gypsum—consisting of lime in the form of hydrated sulphate of lime ($CaSO_4 \cdot 2H_2O$); or

(7) Lime in other forms as prescribed.

Further, in order to obtain a basis of comparison applicable to all limes for agricultural purposes, the chemical analyses shall in every case be stated in terms of calcium oxide (CaO). In addition to this the neutralising value and, except in the case of burnt lime, the degree of fineness should be shown, see table on following page.

If similar weights of 100 per cent. pure calcium carbonate and another lime are taken, then the neutralising value of the lime concerned is the amount of acid that the given weight of such lime will neutralise, taking the amount of the same acid which the given weight of 100 per cent. pure calcium carbonate will neutralise as being 100. The neutralising value is a comparative figure only.

Several lime deposits have come under notice that contain appreciable proportions of magnesium carbonate, therefore consideration is being given to declaring the maximum percentage of magnesia (MgO) upon the label; further, it may be found necessary to provide that low grade limes shall not contain less than 35 per cent. calcium oxide (CaO).

Burnt Lime.

It should be noted that by the time a farmer applies burnt lime to his ground it has usually started to slake—i.e., take in carbon dioxide and water from the air. This naturally increases the weight but reduces the neutralising value and the percentage of CaO present; of course the actual weight of CaO is unchanged, and for practical purposes a farmer should assume the amount of burnt lime received is the same as the weight loaded at the lime works. This means that, assuming the lime consists of 20 tons with a neutralising value of 160 when loaded on the trucks, and is intended for application at the rate of 2 tons per acre, if the lime received weighs 21 tons it should still be divided into 10 lots and the resultant 2 tons 2 cwt. applied per acre—the additional weight making up for the reduction in neutraising value and the reduction per cent. of CaO.

Only lime that is "newly burnt" when actually loaded on to trucks should be sold as burnt lime; if the lime has slaked previous to loading it should be sold as slaked lime with a lower lime (CaO) content and neutralising value.

PROPOSED METHOD OF SHOWING GUARANTEE ON LABELS RELATING TO THE VARIOUS KINDS OF LIME.

	Calcium Oxide (CaO) as—			Neutralising Value.	Fine.	Coarse.
	Burnt Lime.	Hydrated Lime.	Calcium Carbonate.			
	%	%	%		%	%
Burnt Lime—						
Specimen A	*85·0*	..	..	*152*	..	..
Specimen B	*90·0*	..	..	*161*	..	..
Slaked Lime—						
Specimen C	..	*50·0*	*15·0*	*120*	*80*	*20*
Process Lime—						
Specimen D	..	*3·5*	*47·0*	*92*	*80*	*20*
Pulverised Limestone—						
Specimen E	..	..	*51·0*	*93*	*90*	*10*
Specimen F	..	..	*53·0*	*97*	*95*	*5*
Earthy Lime—						
Specimen G	..	..	*46·0*	*85*	*50*	*50*

LIME.

Registered by the Undermentioned as Producers within the Meaning of the Fertilizers Acts and Regulations.	* Guaranteed by Producer or Found on Analysis.					
	Calcium Oxide CaO	Calcium Hydroxide $Ca(OH)_2$	Calcium Carbonate $Ca CO_3$	Neutralising Value.	Fineness	
					Fine	Coarse
	%	%	%		%	%
Burnt Lime.						
A.C.F. and Shirley's Fertilizers Ltd., Brisbane	*85·0*	..	..	..	..	..
	93·0	..	..	..	..	..
Ambrose Lime Works, Ambrose	..	*88·0*	*6·0*	..	..	..
H. W. Ambrose, Tamaree	**62·9**	**32·6**	..	**157·0**	..	..
	96·0	..	..	..	..	..
Crotty Lime Works, Almaden	**70·9**	**28·8**	..	**167·0**	..	..
	97·0	..	..	..	..	..
M. Demchok, Mungana	..	**66·9**	**28·4**	**121·5**	..	..
	88·0	..	..	..	..	..
Ryan Lime Co., Pty., Ltd., Townsville	**78·4**	**15·3**	..	**164·0**	..	..
Slaked Lime.						
(No registrations effected).						
Process Lime.						
	..	*8·0*	*84·0*	..	*80*	*20*
A.C.F. and Shirley's Fertilizers Ltd., Brisbane	..	**5·0**	**87·7**	**95·0**	**79**	**21**
	..	..	*80·0*	..	*90*	*5*
Australian Chemical Co., Ltd., Brisbane	..	..	**87·7**	**95·0**	**79**	**21**
	..	**5·0**				
Pulverised Limestone.						
	..	..	*95·0*	..	*50*	*50*
A.C.F. and Shirley's Fertilizers Ltd., Brisbane	..	..	**95·6**	**97·5**	**96**	**4**
	..	..	*95·0*	..	*50*	*50*
Ambrose Lime Works, Ambrose	..	..	**95·6**	**97·5**	**96**	**4**
	..	..	*95·0*	..	*85*	*15*
Breen and Olsen, Marmor	..	..	**92·6**	**93·0**	**100**	..
	..	..	*97·0*	..	*94*	*6*
Crotty Lime Works, Almaden	..	..	**98·8**	**99·0**	**99**	**1**
	..	..				
Earthy Lime.						
	..	..	*95·0*	..	*85*	*15*
Breen & Olsen, Marmor	..	..	**96·2**	**93·0**	**100**	..
	..	..	**96·8**	**96·5**	**100**	..
	..	..	*85·0*	..	*69*	*16*
Ryan Lime Co., Townsville	..	..	**87·0**	**88·5**	**44**	**56**
	..	..	*90·8*	..	*73*	*27*
Webb and Son, Reid River	..	..				

* Figures in *italics* set out the Seller's Guarantee ; the other figures give the analyses of the samples.

Straight Fertilizers containing Nitrogen, Phosphoric Acid, and/or Potash.

* Guaranteed by Producer or Found on Analysis.

Registered by the Undermentioned as Producers within the Meaning of the Regulations.	Nitrogen as—				Phosphoric Acid.			Potash as—			Fineness.		
	Sodium Nitrate.	Potassium Nitrate.	Ammonium Sulphate.	Blood, Bone, Flesh, and Offal.	Water Soluble.	From Bone.		Sulphate.	Chloride.	Nitrate.	Fine Material.	Coarse Material.	Unspecified Material.
	%	%	%	%	%	%	%	%	%	%	%	%	%
Nitrates of Soda and/or Potash.													
A.C.F. and Shirley's Fertilizers Ltd., Little Roma Street, Brisbane, and Townsville—													
A.C.F. Nitrate of Soda	*15·6*	..	..	..	..	..	..	..	..	..	..	..	..
Fertiliser Distributers Pty., Ltd., Little Roma Street, Brisbane—													
F.D.L. Nitrate of Soda	*16·0*	..	..	..	..	..	..	..	..	..	..	..	..
F.D.L. Nitrapo	*10·7*	*4·6*	..	..	..	..	..	..	..	*15·6*	..	..	..
	10.7	**4.6**	..	..	..	..	..	..	..	**15.6**	..	..	..
Webster and Co., Pty., Ltd., Mary Street, Brisbane—													
Crown Brand Nitrate of Soda	*15·5*	..	..	..	..	..	..	..	..	..	..	..	..
Sulphate of Ammonia.													
A.C.F. and Shirleys Fertilizers Ltd., Little Roma Street, Brisbane, and Townsville—													
Sulphate of Ammonia	..	..	*20·6*	..	..	..	..	..	..	..	..	..	..
The Committee of Direction of Fruit Marketing, Turbot Street, Brisbane—													
Sulphate of Ammonia	..	..	*20·5*	..	..	..	..	..	..	..	..	..	..
Fertiliser Distributers Pty., Ltd., Little Roma Street, Brisbane—													
Sulphate of Ammonia	..	..	*21·0*	..	..	..	..	..	..	..	..	..	..
General Fertilizers Ltd., 125 Adelaide Street, Brisbane—													
Sulphate of Ammonia	..	..	*20·5*	..	..	..	..	..	..	..	..	..	..
G. F. Hudson, Innisfail—													
Sulphate of Ammonia	..	..	*20·5*	..	..	..	..	..	..	..	..	..	..
Webster and Co., Pty., Ltd., Mary Street, Brisbane—													
Crown Brand Sulphate of Ammonia	..	..	*20·0*	..	..	..	..	..	..	..	..	..	..
Superphosphate.													
A.C.F. and Shirleys Fertilizers Ltd., Little Roma Street, Brisbane and Townsville—													
Shirley's High-Grade Superphosphate	..	..	..	..	*20·5*	..	..	..	..	..	..	..	..
Fertiliser Distributers Pty., Ltd., Little Roma Street, Brisbane—													
Sulphide Superphosphate	..	..	..	..	*20·5*	..	..	..	..	..	..	..	..
General Fertilizers Ltd., 125 Adelaide Street, Brisbane—													
Sulphide Superphosphate	..	..	..	..	*20·5*	..	..	..	..	..	..	..	..
Gibbs, Bright, and Co., 406 Queen Street, Brisbane—													
Sulphide Superphosphate	..	..	..	..	*20·5*	..	..	..	..	..	..	..	..
G. F. Hudson, Innisfail—													
Superphosphate	..	..	..	..	*20·5*	..	..	..	..	..	..	..	..
The Summit Fruit Growers' Co-op. Association, Ltd., The Summit—													
Superphosphate	..	..	..	..	*20·5*	..	..	..	..	..	..	..	..
Webster and Co., Ltd., Mary Street, Brisbane—													
Crown Brand Superphosphate	..	..	..	..	*21·0*	..	..	..	..	..	..	..	..
Basic Super.													
A.C.F. and Shirleys Fertilizers Ltd., Little Roma Street, Brisbane, and Townsbille—													
Shirley's Basic Super	..	..	..	..	..	..	†*17·0*	..	..	..	..	..	..
Phosphate Rock.													
A.C.F. and Shirleys Fertilizers Ltd., Little Roma Street, Brisbane, and Townsville—													
Shirley's Ground Phosphate Rock	..	..	..	..	..	..	‡*37·0*	..	..	..	*95*	*5*	..
Gibbs, Bright, and Co., 406 Queen Street, Brisbane—													
Finely Ground Nauru Phosphate	..	..	..	..	..	..	‡*37·0*	..	..	..	*95*	*5*	..
Muriate of Potash.													
A.C.F. and Shirleys Fertilizers Ltd., Little Roma Street, Brisbane, and Townsville—													
A.C.F. Muriate of Potash	..	..	..	..	..	..	..	..	*50·0*	..	..	..	..
The Committee of Direction of Fruit Marketing, Turbot Street, Brisbane—													
Muriate of Potash	..	..	..	..	..	..	..	..	*51·0*	..	..	..	..
Fertiliser Distributers Pty., Ltd., Little Roma Street, Brisbane—													
Muriate of Potash	..	..	..	..	..	..	..	..	*51·0*	..	..	..	..
General Fertilizers Ltd., 125 Adelaide Street, Brisbane—													
G. F. Muriate of Potash	..	..	..	..	..	..	..	..	*52·0*	..	..	..	..
G. F. Hudson, Innisfail—													
Muriate of Potash	..	..	..	..	..	..	..	..	*51·0*	..	..	..	..
Sulphate of Potash.													
A.C.F. and Shirleys Fertilizers Ltd., Little Roma Street, Brisbane, and Townsville—													
A.C.F. Sulphate of Potash	..	..	..	..	..	..	..	*48·0*	..	..	..	..	..
Fertiliser Distributers Pty., Ltd., Little Roma Street, Brisbane—													
Sulphate of Potash	..	..	..	..	..	..	..	*48·6*	..	..	..	..	..
Webster and Co., Pty., Ltd., Mary Street, Brisbane—													
Crown Brand Sulphate of Potash	..	..	..	..	..	..	..	*50·0*	..	..	..	..	..

* Figures in *italics* set out the Seller's Guarantee ; the other figures give the analyses of the samples.

† Citrate Soluble Phosphoric Acid. ‡ Phosphoric Acid from Nauru Phosphate

Organic Fertilizers, the Product of Bone Mills, Meatworks, and/or Bacon Factories.

*Guaranteed by Producer or Found on Analysis.

Registered by the Undermentioned as Producers within the Meaning of the Regulations.	Nitrogen as—				Phosphoric Acid.			Potash as—			Fineness.		
	Sodium Nitrate.	Potassium Nitrate.	Ammonium Sulphate.	Blood, Bone, Flesh, and Offal.	Water Soluble.	From Bone.		Sulphate.	Chloride.	Nitrate.	Fine Material.	Coarse Material.	Unspecified Material.
	%	%	%	%	%	%	%	%	%	%	%	%	%
Dried Blood.													
A.C.F. and Shirleys Fertilizers Ltd., Little Roma Street, Brisbane, and Townsville—													
Dried Blood (Q.M.I.B.)	..	..	..	*12·7*	..	..	..	..	..	..	*81*	*18*	*1*
Thomas Borthwick and Sons (Aust.) Ltd., Eagle Street, Brisbane—													
Moreton Dried Blood	..	..	..	*12·4*	..	..	..	..	..	..	*82*	*18*	..
Fertiliser Distributers Pty., Ltd., Little Roma Street, Brisbane—													
Dried Blood (Q.M.I.B.)	..	..	..	*12·7*	..	..	..	..	..	..	*81*	*18*	*1*
Queensland Meat Export Co., Ltd., 113 Eagle Street, Brisbane—													
Q.M.E. Meatworks Dried Blood—Ross River	..	..	..	*12·5*	..	*2·1*	..	..	..	..	*80*	*16*	*4*
Q.M.E. Meatworks Dried Blood—Ross River	..	..	..	*11·1*	..	*2·6*	..	..	..	..	*68*	*26*	*6*
	..	..	..	**11.1**	..	**2.6**	..	..	..	..	**68**	**26**	**6**
Queensland Meat Industry Board, Cannon Hill—													
Dried Blood (Q.M.I.B.)	..	..	..	*12·5*	..	..	..	..	..	..	*65*	*34*	*1*
Bone Dust.													
A.C.F. and Shirleys Fertilizers Ltd., Little Roma Street, Brisbane, and Townsville—													
Runcorn Bone Dust	..	..	..	*3·6*	..	*23·0*	..	..	..	..	*60*	*40*	..
Fertiliser Distributers Pty., Ltd., Little Roma Street, Brisbane—													
F.D.L. Bone Dust	..	..	..	*3·0*	..	*22·0*	..	..	..	..	*75*	*25*	..
F.D.L. Bone Flour	..	..	..	*3·0*	..	*21·0*	..	..	..	..	*95*	..	*5*
General Fertilizers Ltd., 125 Adelaide Street, Brisbane—													
G.F. Bone Dust	..	..	..	*3·6*	..	*24·0*	..	..	..	..	*80*	*20·0*	..
S. and W. Lyell, Gympie Road, Aspley													
Aspley Bone Dust	..	..	..	*3·5*	..	*24·0*	..	..	..	..	*52*	*47*	..
Blood and Bone.													
A.C.F. and Shirleys Fertilizers Ltd., Little Roma Street, Brisbane, and Townsville—													
Blood and Bone (Darling Downs Co-op.)	..	..	..	*5·0*	..	*14·0*	..	..	..	..	*65*	*22*	*13*
	..	..	..	**5.4**	..	**16.7**	..	..	..	..	**70**	**26**	**4**
Meatworks Fertilizer (Q.M.I.B.)	..	..	..	*5·2*	..	*16·1*	..	..	..	..	*82*	*15*	*3*
Shirley's Blood and Bone Fertilizer	..	..	..	*5·0*	..	*16·0*	..	..	..	..	*60*	*40*	..
Thomas Borthwick and Sons (Aust.), Ltd., Eagle Street, Brisbane—													
Moreton Fertilizer, No. 9	..	..	..	*6·0*	..	*15·4*	..	..	..	..	*80*	*19*	..
Moreton Fertilizer, No. 10	..	..	..	*5·0*	..	*17·5*	..	..	..	..	*85*	*14*	..
L. C. Dobbie, Cottonvale—													
Blood and Bone	..	..	..	*5·2*	..	*15·0*	..	..	..	..	*60*	*40*	..
Fertiliser Distributers Pty., Ltd., Little Roma Street, Brisbane—													
F.D.L. Meatworks Fertiliser	..	..	..	*5·0*	..	*15·0*	..	..	..	..	*82*	*15*	*3*
General Fertilizers Ltd., 125 Adelaide Street, Brisbane—													
G.F. Meatworks Fertilizer	..	..	..	*6·0*	..	*13·5*	..	..	..	..	*80*	*20*	..
Gomersall Bros., Mary Street, Gympie—													
Gympie Fertilisers	..	..	..	*3·6*	..	*23·2*	..	..	..	..	*70*	*25*	*5*
	..	..	..	**3.7**	..	**23.5**	..	..	..	..	**72**	**24**	**4**
	..	..	..	**3.7**	..	**23.6**	..	..	..	..	**72**	**26**	**2**
S. and W. Lyell, Gympie Road, Aspley—													
Lyell's Fertilizer	..	..	..	*2·9*	..	*21·9*	..	..	..	..	*75*	*25*	..
Paton, Burns, Fertilizers	..	..	..	..	..	..	..	..	..	..	..	..	..
The Committee of Direction of Fruit Marketing, Turbot Street, Brisbane —													
B.B. Manure 6 and 16	..	..	..	*6·0*	..	*16·0*	..	..	..	..	*60*	*40*	..
G. F. Hudson, Innisfail—													
B.B. Manure 5 and 15	..	..	..	*5·0*	..	*15·0*	..	..	..	..	*60*	*40*	..
B.B. Manure 6 and 16	..	..	..	*6·0*	..	*16·0*	..	..	..	..	*60*	*40*	..
	..	..	..	**6.4**	..	**15.9**	..	..	..	..	**57**	**40**	**3**
	..	..	..	**6.1**	..	**15.4**	..	..	..	..	**52**	**43**	**5**
The Summit Fruit Growers' Co-op. Association, Ltd., The Summit—													
B.B. Manure 6 and 16	..	..	..	*6·0*	..	*16·0*	..	..	..	..	*60*	*40*	..
Queensland Co-op. Bacon Association, Ltd., Murraric—													
Atlas Brand Fertilizer	..	..	..	*6·5*	..	*12·2*	..	..	..	..	*84*	*14*	*2*
Queensland Meat Export Co., Ltd., Eagle Street, Brisbane—													
Q.M.E. Meatworks Fertilizer—Plain Milled—Ross River	..	..	..	*5·4*	..	*18·1*	..	..	..	..	*82*	*15*	*3*
	..	..	..	*5·6*	..	*15·6*	..	..	..	..	*76*	*21*	*3*
	..	..	..	**5.6**	..	**15.6**	..	..	..	..	**76**	**21**	**3**
Queensland Meat Industry Board, Cannon Hill—													
Meatworks Fertilizer (Q.M.I.B.)	..	..	..	*5·0*	..	*15·0*	..	..	..	..	*77*	*21*	*2*

*Figures in *italics* set out the Seller's Guarantee; the other figures give the analyses of the samples.

Mechanical Mixtures.

* Guaranteed by Producer or Found on Analysis.

Registered by the Undermentioned as Producers within the Meaning of the Regulations.	Nitrogen as—				Phosphoric Acid.		Potash as—			Fineness.		
	Sodium Nitrate.	Potassium Nitrate.	Ammonium Sulphate.	Blood, Bone, Flesh, and Offal.	Water Soluble.	From Bone.	Sulphate.	Chloride.	Nitrate.	Fine Material.	Coarse Material.	Unspecified Material.
	%	%	%	%	%	%	%	%	%	%	%	%
A.C.F. and Shirleys Fertilizers Ltd., Little Roma Street, Brisbane, and Townsville—												
A.C.F. No. 1	..	..	*2·0*	*3·0*	..	*13·0*	*8·0*	..	..	*75*	*25*	..
A.C.F. No. 3	..	..	*4·3*	*1·2*	*8·0*	*6·0*	..	*5·0*	..	*75*	*25*	..
	..	..	**4.9**	**1.4**	**7.9**	**6.9**	..	**5.6**	..	**71**	**28**	1
A.C.F. No. 5	..	..	*3·5*	*0·5*	*6·5*	*5·5*	..	*12·0*	..	*75*	*25*	..
A.C.F. No. 8	..	..	*1·0*	*1·0*	*11·7*	*5·2*	*6·0*	..	..	*75*	*25*	..
	..	..	**1.3**	**1.4**	**11.0**	**6.0**	**6.8**	..	..	**76**	**23**	1
	..	..	..	*2·0*	*10·0*	*7·0*	*6·0*	..	..	*75*	*25*	..
	..	..	..	**2.5**	**8.5**	**9.4**	**6.5**	..	..	**67**	**33**	..
A.C.F. No. 12 (Muriate)	..	..	*3·5*	*2·0*	..	*10·0*	..	*15·0*	..	*75*	*25*	..
A.C.F. Bone and Super	..	..	..	*1·7*	*10·0*	*11·5*	..	..	..	*60*	*40*	..
A.C.F., B. and B., and Super	..	..	..	*2·7*	*10·0*	*7·0*	..	..	..	*75*	*25*	..
A.C.F. B2	..	..	*10·2*	*1·4*	..	*8·0*	..	*5·0*	..	*75*	*25*	..
A.C.F. B3	..	..	*6·0*	*1·0*	*6·1*	*3·8*	..	*10·0*	..	*75*	*25*	..
	..	..	**6.5**	**0.9**	**5.8**	**4.1**	..	**9.9**	..	**75**	**23**	2
	..	..	*4·7*	*2·2*	*3·0*	*7·0*	..	*10·0*	..	*75*	*25*	..
	..	..	**5.2**	**1.9**	**3.1**	**7.4**	..	**10.7**	..	**78**	**20**	2
	..	..	**5.3**	**2.0**	**2.9**	**7.5**	..	**11.2**	..	**78**	**19**	3
A.C.F. B3 Extra	..	..	*6·1*	*0·9*	*6·1*	*3·9*	*5·0*	*5·0*	..	*75*	*25*	..
A.C.F. B3 Sulphate	..	..	*5·5*	*1·5*	*4·9*	*5·1*	*10·0*	..	..	*75*	*25*	..
A.C.F. B4	..	..	*5·6*	*1·4*	*5·5*	*4·5*	..	*8·0*	..	*75*	*25*	..
A.C.F. B6	..	..	*2·0*	*1·5*	*10·2*	*6·5*	..	*2·5*	..	*75*	*25*	..
A.C.F. Bean-up Mixture	..	..	*2·0*	*2·0*	*13·0*	..	*5·0*	..	..	*75*	*25*	..
	..	..	**2.5**	**2.2**	**12.5**	..	**5.3**	..	..	**67**	**32**	1
A.C.F. Granite Fertilizer	..	..	*4·0*	..	*12·0*	..	*10·0*	..	..	..	..	..
A.C.F. Howe's Mixture	..	..	*6·6*	*2·4*	..	*7·0*	*11·0*	..	..	*75*	*25*	..
A.C.F. Howe's Mixture (with Muriate of Potash)	..	..	*6·6*	*2·4*	..	*7·0*	..	*11·0*	..	*75*	*25*	..
A.C.F. K14 Sugar Bureau (1) Planting	..	..	..	*1·0*	*13·0*	*4·0*	..	*7·5*	..	*75*	*25*	..
A.C.F. K15 Sugar Bureau (2) Planting	..	..	..	*1·2*	*9·0*	*3·7*	..	*15·0*	..	*75*	*25*	..
A.C.F. K16 Sugar Bureau (3) Planting	..	..	..	*1·7*	*2·5*	*5·5*	..	*25·0*	..	*75*	*25*	..
A.C.F. K17 Sugar Bureau (1) Ratooning	..	..	*3·0*	*1·2*	*9·5*	*3·5*	..	*6·2*	..	*75*	*25*	..
A.C.F. K18 Sugar Bureau (2) Ratooning	..	..	*3·0*	*1·2*	*7·0*	*3·7*	..	*12·5*	..	*75*	*25*	..
A.C.F. K19 Sugar Bureau (3) Ratooning	..	..	*3·0*	*1·5*	*2·0*	*4·5*	..	*22·5*	..	*75*	*25*	..
A.C.F. Mareeba Mixture	..	..	*1·5*	*3·0*	*12·0*	..	*3·7*	*0·7*	..	*75*	*25*	..
A.C.F. Planting A1	..	..	..	*1·7*	*9·5*	*7·5*	..	*7·5*	..	*75*	*25*	..
A.C.F. Planting B1	..	..	*2·0*	*2·0*	*7·0*	*9·0*	..	*5·2*	..	*75*	*25*	..
A.C.F. Planting Mixture	..	..	..	*1·0*	*14·0*	*3·0*	..	*7·5*	..	*75*	*25*	..
	..	..	..	**1.5**	**13.4**	**5.3**	..	**8.3**	..	**66**	**31**	3
A.C.F. Special No. 12	..	..	*4·0*	*1·5*	..	*8·0*	..	*18·0*	..	*75*	*25*	..
A.C.F. Three 6	..	..	*4·0*	*1·0*	*6·0*	*6·0*	*4·0*	*3·0*	..	*75*	*25*	..
A.C.F. Threights 8 8 8	..	..	*8·0*	..	**8·0*	..	*8·0*	..	..	..	..	..
A.C.F. Tobacco A1	..	..	..	*1·9*	*15·0*	..	*4·8*	..	..	*75*	*25*	..
A.C.F. Tobacco Mixture 4–12–6	*2·0*	..	..	*2·0*	*12·0*	..	*6·0*	..	..	*75*	*25*	..
A.C.F. Tobacco Mixture 4–12–6 (with Sulphate of Ammonia)	..	..	*2·0*	*2·0*	*12·0*	..	*6·0*	..	..	*75*	*25*	..
A.C.F. Tobacco Mixture 4·5–15–4·5	..	..	*2·2*	*2·2*	*9·0*	*6·0*	*4·5*	..	..	*75*	*25*	..
	..	..	**2.4**	**2.2**	**7.6**	**7.9**	**5.6**	..	..	**59**	**34**	7
A.C.F. Trinine 9 9 9	..	..	*7·8*	*1·2*	*1·3*	*7·7*	..	*9·0*	..	*75*	*25*	..
A.C.F. Trinine 9 9 9 (Sulphate)	..	..	*7·6*	*1·4*	..	*9·0*	*9·0*	..	..	*75*	*25*	..
A.C.F. Woombye Mixture	..	..	..	*5·1*	..	*9·0*	*12·0*	..	..	*75*	*25*	..
Blood and Bone and Muriate of Potash (Special Mixture)	..	..	..	*4·5*	..	*12·5*	..	*10·0*	..	*75*	*25*	..
Kwikgro Home Garden Fertilizer	..	..	*2·5*	*1·5*	..	*14·0*	*7·0*	..	..	*90*	*10*	..
Rose Fertilizer	..	..	*3·0*	*2·0*	*4·0*	*10·0*	*5·0*	..	..	*75*	*25*	..
Shirley's 7 7 7 Fertilizer	..	..	*7·0*	..	*7·0*	..	*7·0*	..	..	..	..	..
Shirley's Bana Fertilizer	..	..	*4·0*	..	*10·5*	..	..	*13·0*	..	..	..	..
Shirley's Fertilizer No. 11 Mixture	..	..	*2·0*	..	*15·5*	..	..	*4·0*	..	..	..	..
Shirley's Improved Drill Mixture	..	..	*3·0*	*1·0*	*7·3*	*3·2*	..	*13·5*	..	*75*	*25*	..
Shirley's No. 8 Fertilizer	..	..	*4·1*	..	*16·4*	..	..	..	..	..	..	..
Shirley's No. 9 Pasture Fertilizer	..	..	*7·0*	..	*13·6*	..	..	..	..	..	..	..
Shirley's Pioneer Special Mixture	..	..	..	*5·1*	..	*12·6*	..	*5·0*	..	*75*	*25*	..
Shirley's Q5 Fertilizer	..	..	*4·0*	..	*12·0*	..	*10·0*	..	..	..	..	..
	..	..	**3.9**	..	**12.0**	..	**10.8**	..	..	..	..	..
Shirley's Q5 (Muriate) Fertilizer	..	..	*4·0*	..	*12·0*	..	..	*10·0*	..	..	..	..
Shirley's Tropic Fertilizer	..	..	*10·0*	..	*7·0*	..	*7·0*	..	..	..	..	..
Thomas Borthwick and Sons (Aust.), Ltd., Eagle Street, Brisbane—												
Moreton Fertilizer No. 1	..	..	..	*4·6*	..	*14·4*	*9·6*	..	..	*72*	*24*	..
Moreton Fertilizer No. 2	..	..	..	*5·3*	..	*16·2*	*4·8*	..	..	*81*	*15*	..
Moreton Fertilizer No. 3	..	..	*2·0*	*3·4*	*3·3*	*10·6*	*7·6*	..	..	*80*	*17*	..
Fertiliser Distributers Pty., Ltd., Little Roma Street, Brisbane—												
F.D.L. No. 2	..	..	*5·8*	*1·2*	*3·0*	*6·0*	..	*3·0*	..	*75*	*25*	..
F.D.L. No. 3	..	..	*4·2*	*0·8*	*10·5*	*3·5*	..	*3·0*	..	*75*	*25*	..
F.D.L. 3 8 3	*1·0*	..	*1·0*	*1·0*	*8·0*	..	*2·0*	*1·0*	..	*75*	*25*	..
F.D.L. V5	..	..	*2·2*	*1·5*	*6·0*	*6·0*	..	*12·0*	..	*75*	*25*	..
F.D.L. No. 6	..	..	*4·5*	*1·5*	*6·0*	*6·2*	..	*8·0*	..	*75*	*25*	..
F.D.L. No. 7	..	..	*1·2*	*0·8*	*10·0*	*6·0*	..	*6·0*	..	*75*	*25*	..
F.D.L. No. 9	..	..	*1·0*	*2·0*	*8·0*	*6·0*	*6·0*	..	..	*75*	*25*	..
F.D.L. No. 12	..	..	*3·5*	*1·5*	*4·0*	*7·2*	..	*12·0*	..	*75*	*25*	..
F.D.L. No. 14	..	..	*8·1*	*2·7*	*3·6*	*3·5*	..	*1·8*	..	*75*	*25*	..
F.D.L. B.K. No. 1	..	..	*8·5*	*1·5*	*3·2*	*5·8*	..	*5·0*	..	*75*	*25*	..
F.D.L. Bone and Super	..	..	..	*1·5*	*10·2*	*11·0*	..	..	..	*75*	*25*	..
F.D.L. Cavendish Special	*1·6*	*0·4*	*3·0*	*1·0*	*2·0*	*4·2*	..	*14·0*	*2·0*	*75*	*25*	..
F.D.L. Coff's Cavendish Special	..	..	*4·2*	*2·0*	*2·5*	*8·5*	..	*10·0*	..	*75*	*25*	..
F.D.L. Direction No. 1	..	..	*1·5*	*2·5*	*4·0*	*8·0*	..	*12·0*	..	*75*	*25*	..
F.D.L. Direction No. 3	..	..	*2·5*	*2·5*	*8·0*	*4·0*	*2·0*	*5·0*	..	*75*	*25*	..
F.D.L. Direction No. 5	..	..	*4·0*	..	*11·0*	*2·0*	..	*10·0*	..	*75*	*25*	..
F.D.L. No. 4 Fish	..	..	*3·0*	*2·0*	*3·0*	*9·2*	..	*5·0*	..	*75*	*25*	..
	..	..	**3.8**	**2.5**	**2.8**	**11.5**	..	**5.7**	..	**76**	**22**	2
F.D.L. Fish 11	..	..	*2·2*	*1·5*	*7·2*	*7·0*	..	*3·7*	..	*75*	*25*	..

* Figures in *italics* set out the Seller's Guarantee; the other figures give the analyses of the samples.

MECHANICAL MIXTURES—*continued.*

* Guaranteed by Producer or Found on Analysis.

Registered by the Undermentioned as Producers within the Meaning of the Regulations.	Nitrogen as—				Phosphoric Acid.		Potash as—			Fineness.		
	Sodium Nitrate.	Potassium Nitrate.	Ammonium Sulphate.	Blood, Bone, Flesh, and Offal.	Water Soluble.	From Bone.	Sulphate.	Chloride.	Nitrate.	Fine Material.	Coarse Material.	Unspecified Material.
	%	%	%	%	%	%	%	%	%	%	%	%
Fertiliser Distributers Pty., Ltd., Little Roma Street, Brisbane—												
F.D.L. Fish Nitrate	..	*5·2*	*1·5*	*1·0*	*5·0*	*4·5*	..	*2·5*	..	*75*	*25*	..
F.D.L. Fish Sulphate	..	..	*8·5*	*1·0*	*5·0*	*4·5*	..	*2·5*	..	*75*	*25*	..
F.D.L. Howe's Mixture	..	..	*7·0*	*2·0*	..	*7·0*	..	*11·0*	..	*75*	*25*	..
F.D.L. Lawnex	*2·6*	*1·1*	*2·0*	..	*12·0*	..	..	..	*3·7*	*75*	*25*	..
F.D.L. Mount Etna No. 5	..	..	*3·0*	*2·0*	*4·0*	*9·2*	..	*7·0*	..	*75*	*25*	..
F.D.L. Mount Etna V5	..	..	*2·5*	*1·2*	*4·0*	*8·0*	..	*12·0*	..	*75*	*25*	..
F.D.L. Mount Etna No. 6	..	..	*4·5*	*1·5*	*4·0*	*8·2*	..	*8·0*	..	*75*	*25*	..
F.D.L. Mount Etna No. 8	..	..	*6·1*	*1·9*	*2·2*	*8·0*	..	*8·0*	..	*75*	*25*	..
F.D.L. Mount Etna No. 10	..	..	*7·7*	*1·3*	..	*7·0*	..	*11·0*	..	*75*	*25*	..
F.D.L. Nitrate Special	*4·0*	..	..	*2·0*	*3·0*	*6·0*	..	*10·0*	..	*75*	*25*	..
F.D.L. Pasture Fertiliser	..	..	*4·2*	..	*16·4*	..	..	..	..	*60*	*40*	..
F.D.L. Pineapple Special	..	..	*9·5*	*0·5*	*5·5*	*1·5*	*7·0*	..	..	*75*	*25*	..
F.D.L. Potpine	..	..	*2·9*	*2·1*	*3·5*	*6·0*	*11·0*	..	..	*75*	*25*	..
F.D.L. Ratoon	..	..	*4·5*	*1·5*	*4·5*	*4·0*	..	*11·0*	..	*75*	*25*	..
	..	..	*3·5*	*3·0*	*2·0*	*6·7*	..	*11·0*	..	*75*	*25*	..
	..	..	**4.1**	**3.8**	**1.5**	**8.0**	..	**10.8**	..	**76**	**23**	**1**
F.D.L. Special Planting Mixture	..	..	*1·5*	*1·7*	*8·5*	*7·5*	..	*5·0*	..	*75*	*25*	..
F.D.L. Tobacco No. 1	*2·0*	..	*1·0*	*1·0*	*12·0*	..	*4·5*	*1·5*	..	*75*	*25*	..
F.D.L. Tobacco No. 2	..	..	*1·5*	*0·5*	*15·0*	..	*3·0*	*2·0*	..	*75*	*25*	..
F.D.L. Topoff	*3·5*	*1·5*	..	..	*10·0*	..	..	*5·0*	*5·0*	*75*	*25*	..
F.D.L. Volcanic	..	..	*2·2*	*1·8*	*1·5*	*7·5*	..	*20·0*	..	*75*	*25*	..
General Fertilizers Ltd., 125 Adelaide Street, Brisbane—												
G.F. 1	..	..	*3·0*	..	*17·0*	..	..	*3·0*	..	..	..	..
G.F. 2	..	..	*1·5*	*2·5*	*1·0*	*11·0*	..	*7·0*	..	*80*	*20*	..
	..	..	*1·5*	*2·5*	..	*13·0*	..	*7·0*	..	*80*	*20*	..
	..	..	**2.1**	**2.2**	..	**13.4**	..	**7.6**	..	**73**	**26**	**1**
	..	..	**2.3**	**2.2**	..	**12.5**	..	**6.8**	..	**62**	**37**	**1**
G.F. 3	..	..	*4·5*	*2·5*	*1·0*	*11·0*	..	*9·0*	..	*80*	*20*	..
	..	..	*4·5*	*2·5*	*1·5*	*10·5*	..	*9·0*	..	*80*	*20*	..
	..	..	**5.1**	**2.1**	**1.5**	**9.4**	..	**10.0**	..	**79**	**20**	**1**
	..	..	**4.1**	**2.6**	**1.2**	**11.0**	..	**8.3**	..	**66**	**33**	**1**
G.F. 4	..	..	*1·5*	*2·5*	*3·0*	*12·0*	..	*6·0*	..	*80*	*20*	..
	..	..	*1·5*	*2·5*	*6·0*	*11·0*	..	*6·0*	..	*80*	*20*	..
	..	..	**2.2**	**2.3**	**3.7**	**12.7**	..	**6.0**	..	**57**	**42**	**1**
G.F. 5	..	..	*2·5*	*2·5*	*1·0*	*11·0*	..	*9·0*	..	*80*	*20*	..
	..	..	*2·0*	*3·0*	..	*13·0*	..	*9·0*	..	*80*	*20*	..
	..	..	**2.3**	**2.7**	..	**12.2**	..	**9.2**	..	**75**	**23**	**2**
	..	..	**3.2**	**1.9**	..	**11.2**	..	**9.8**	..	**73**	**26**	**1**
G.F. 6	..	..	*2·5*	*2·0*	..	*10·0*	..	*15·0*	..	*80*	*20*	..
G.F. 7	..	..	*7·0*	*2·0*	*1·0*	*8·0*	..	*10·0*	..	*80*	*20*	..
J.C. Hutton Pty., Ltd., Roma Street, Brisbane—												
Hutton's Special Fertiliser	..	..	..	*5·0*	*3·8*	*11·0*	..	..	..	*70*	*22*	*8*
Hutton's Special Complete Fertiliser	..	..	..	*4·5*	*3·4*	*9·8*	..	*5·0*	..	*70*	*22*	*8*
Hutton's Special Sugar Fertiliser M	..	..	*4·8*	*2·2*	*3·5*	*6·5*	..	*10·0*	..	*75*	*25*	..
Hutton's Special Sugar Fertiliser N	..	..	..	*1·8*	*8·0*	*10·0*	..	*7·5*	..	*75*	*25*	..
Hutton's Special Sugar Fertiliser P	..	..	..	*4·5*	..	*13·5*	..	*7·5*	..	*70*	*22*	*8*
Hutton's Special Sugar Fertiliser S	..	..	..	*2·0*	*10·0*	*11·0*	..	..	..	*75*	*25*	..
Hutton's Special Sugar Fertiliser B	..	..	..	*5·5*	*15·0*	..	..	..	..	*70*	*22*	*8*
Paton Burns Fertilizers.												
The Committee of Direction of Fruit Marketing, Turbot Street, Brisbane—												
C.O.D. 1	..	..	*1·5*	*2·0*	*4·0*	*8·0*	..	*12·0*	..	*80*	*20*	..
	..	..	**1.8**	**1.8**	**4.4**	**10.0**	..	**11.9**	..	**66**	**25**	**9**
C.O.D. 3	..	..	*3·0*	*2·0*	*4·0*	*8·0*	..	*7·0*	..	*80*	*20*	..
	..	..	**3.5**	**2.0**	**3.6**	**8.1**	..	**6.5**	..	**57**	**35**	**8**
C.O.D. 5	..	..	*3·2*	*0·8*	*10·0*	*2·0*	..	*10·0*	..	*80*	*20*	..
G. F. Hudson, Innisfail—												
Q3	..	..	*5·5*	*1·5*	*6·0*	*4·0*	..	*10·0*	..	*80*	*20*	..
	..	..	*4·5*	*2·4*	*2·1*	*7·9*	..	*10·0*	..	*80*	*20*	..
	..	..	**4.6**	**2.3**	**1.6**	**9.2**	..	**10.1**	..	**67**	**25**	**8**
Q4 Cane Special	..	..	*4·0*	*2·3*	*4·1*	*8·3*	..	*7·5*	..	*80*	*20*	..
Planting Mixture	..	..	..	*1·0*	*11·0*	*6·0*	..	*7·5*	..	*80*	*20*	..
	..	..	..	**1.1**	**10.0**	**7.6**	..	**8.2**	..	**44**	**38**	**18**
Howe's Mixture	..	..	*6·6*	*2·3*	..	*7·0*	..	*11·0*	..	*80*	*20*	..
Howe's Mixture (Northern)	..	..	*8·8*	*0·2*	*5·4*	*1·6*	..	*11·0*	..	*80*	*20*	..
7 7 7 Three Sevens	..	..	*5·5*	*1·5*	*3·0*	*4·0*	..	*7·0*	..	*80*	*20*	..
Sugar Bureau No. 1 (Ratooning)	..	..	*3·0*	*1·2*	*9·5*	*3·5*	..	*6·2*	..	*80*	*20*	..
Sugar Bureau No. 2 (Ratooning)	..	..	*3·0*	*1·2*	*7·0*	*3·7*	..	*12·5*	..	*80*	*20*	..
Sugar Bureau No. 3 (Ratooning)	..	..	*3·0*	*1·5*	*2·0*	*4·5*	..	*22·5*	..	*80*	*20*	..
Sugar Bureau No. 1 (Planting)	..	..	..	*1·0*	*13·0*	*4·0*	..	*7·5*	..	*80*	*20*	..
Sugar Bureau No. 2 (Planting)	..	..	..	*1·2*	*9·0*	*3·7*	..	*15·0*	..	*80*	*20*	..
Sugar Bureau No. 3 (Planting)	..	..	..	*1·7*	*2·5*	*5·5*	..	*25·0*	..	*80*	*20*	..
The Summit Fruit Growers' Co-op. Association, Ltd., The Summit—												
Summit No. 1	..	..	*1·0*	*2·5*	*4·0*	*8·0*	..	*12·0*	..	*80*	*20*	..
Summit No. 2	..	..	*2·5*	*2·5*	*4·0*	*8·0*	..	*7·0*	..	*80*	*20*	..
Webster and Co., Pty., Ltd., Mary Street, Brisbane—												
Crown Brand Special Complete Manure	..	..	*4·0*	..	*13·5*	..	*7·0*	..	..	..	..	..

* Figures in *italics* set out the Seller's Guarantee; the other figures give the analyses of the samples.

Where deficiencies have occurred in the above fertilisers, the necessary steps have been taken in order to remedy such deficiences, which has in one case necessitated improvements to plant at the works.

Pest Destroyers Act, 1934-1935.

The following table sets out particulars relative to the operations of the Act from 1st July, 1934, to 30th June, 1935::—

—	July to December, 1934.	January to June, 1935.	Twelve Months Total.
Registrations—			
Effected	19	268	297
Special Mixtures ..	..	10	
Pending	..	75	75
Samples received from—			
Dealers	10	1	11
Buyers	..	..	..
Inspectors	4	..	4

Until the present financial year the Regulations in operation had not been amended since the inception of the Act in 1923—eleven years ago. During this time it was found that in many ways such Regulations could be improved upon by being brought into line with current practices, and incorporating the results of current research. The forms in use also required to be simplified, with the cumulative result that new Regulations were drafted. These were gazetted on the 20th December, 1934.

Endless confusion has been caused in the past in connection with liquid or paste-form pest destroyers by the expression of the percentage by weight to volume or weight to weight indiscriminately. In order to eliminate this it is now provided that all pest destroyers must show the percentage of the active constituents expressed as a true percentage—i.e., weight to weight (grammes per 100 grammes).

In addition to the above amendments a complete overhaul of the standards and definitions of pest destroyers was made, such being set out in table form and showing the particulars to be stated on the labels with respect to each group of pest destroyers.

Copies of the amended Regulations may be had upon application to this Branch.

The following tables set out lists of the principal pest destroyers registered and the respective guarantees relating to same:

Name of Pest Destroyer.	Active Constituents as Declared by Seller.	Queensland Wholesale Dealer.
Arsenate of Lead.		
Powder.	%	
A.C.F. Arsenate of Lead Powder	*31·0* Arsenic Pentoxide As_2O_5	A.C.F. and Shirleys Fertilizers, Ltd., Little Roma Street, Brisbane
	0·5 Maximum Water Soluble Arsenic Pentoxide As_2O_5	
Berger's Mercury Brand Arsenate of Lead (Powder)	*30·0* Arsenic Pentoxide As_2O_5	Neptune Oil Co., Ltd., 301–307 Ann Street, Brisbane
	0·5 Maximum Water Soluble Arsenic Pentoxide As_2O_5	
Bickford's Aero Brand Arsenate of Lead (Powder)	*31·5* Arsenic Pentoxide As_2O_5	A. M. Bickford and Sons, Tank Street, Brisbane
	0·25 Maximum Water Soluble Arsenic Pentoxide As_2O_5	
Cooper's Arsinette	*30·0* Arsenic Pentoxide As_2O_5	Queensland Fruitgrowers' Society, Ltd., Makerston Street, Brisbane
	0·5 Maximum Water Soluble Arsenic Pentoxide As_2O_5	
Lead—Spread	*30·0* Arsenic Pentoxide As_2O_5	Neptune Oil Co., Ltd., 301–307 Ann Street, Brisbane
	0·5 Maximum Water Soluble Arsenic Pentoxide As_2O_5	
Pinnacle Brand Arsenate of Lead	*30·0* Arsenic Pentoxide As_2O_5	Clou-Dust Spray Manufacturers, 152 Stanley Street, South Brisbane
	0·5 Maximum Water Soluble Arsenic Pentoxide As_2O_5	
Vallo Arsenate of Lead (Powder)	*32·0* Arsenic Pentoxide As_2O_5	A. Victor Leggo and Co., Pty., Ltd., 72 Albert Street, Brisbane
	0·5 Maximum Water Soluble Arsenic Pentoxide As_2O_5	
Paste.		
Berger's Mercury Brand Arsenate of Lead (Paste)	*30·0* Arsenic Pentoxide As_2O_5 (Dry Basis) ..	Neptune Oil Co., Ltd., 301–307 Ann Street, Brisbane
	0·5 Maximum Water Soluble Arsenic Pentoxide As_2O_5	
Vallo Arsenate of Lead (Paste)	*32·0* Arsenic Pentoxide As_2O_5 (Dry Basis) ..	A. Victor Leggo and Co., Pty., Ltd., 72 Albert Street, Brisbane
	0·5 Maximum Water Soluble Arsenic Pentoxide As_2O_5	
Arsenates of Calcium.		
Vallo Arsenate of Calcium	*40·0* Arsenic Pentoxide As_2O_5	ditto
Arsenate of Soda.		
Vallo Arsenate of Soda	*63·0* Arsenic Pentoxide As_2O_5	ditto
Arsenic.		
Arsenic (Grey)	*95·0* Arsenious Oxide As_2O_3	Queensland Pastoral Supplies, Pty., Ltd., Bowen Street, Brisbane
Grey Arsenic	*95·0* Arsenic Trioxide As_2O_3	A. M. Bickford and Sons, Ltd., Tank Street, Brisbane
Imperial Arsenic	*97·0* Arsenic Trioxide As_2O_3	A. Victor Leggo and Co., Pty., Ltd., 72 Albert Street, Brisbane
Refined Arsenic	*99·0* Arsenic Trioxide As_2O_3	G. Horsburgh and Co., Pty., Ltd., Kent Street, Maryborough
Street's Pure Arsenic	*98·0* Arsenic Trioxide As_2O_3	Wm. Street and Son, 176 Ann Street, Brisbane
Vallo Brand White Arsenic	*99·0* Arsenic Trioxide As_2O_3	A. Victor Leggo and Co., Pty., Ltd., 72 Albert Street, Brisbane

Name of Pest Destroyer.	Active Constituents as Declared by Seller.		Queensland Wholesale Dealer.
ARSENIC PENTOXIDE.			
Vallo Arsenic Pentoxide	% 83·0	Arsenic Pentoxide As_2O_5	A. Victor Leggo & Co., Pty., Ltd., 72 Albert Street, Brisbane
ARSENICAL WEED AND VERMIN DESTROYERS.			
Acco Weed Killer	23·0 2·0	Arsenious Oxide As_2O_3 Cresylic Acid	Australian Chemical Co., Ltd., Donkin Street, South Brisbane
Arzeen (Liquid Form)	46·0	Arsenic Trioxide As_2O_3	A. Victor Leggo and Co., Pty., Ltd., 72 Albert Street, Brisbane
Arzeen (Powder Form)	80·0	Arsenic Trioxide As_2O_3	ditto
Bickford's Ant and Vermin Destroyer	35·0	Arsenious Oxide As_2O_3	A. M. Bickford and Sons, Tank Street, Brisbane
C.O.D. Improved Weed Killer, Liquid Arsenical	40·0	Arsenious Trioxide As_2O_3	Committee of Direction of Fruit Marketing, Turbot Street, Brisbane
Cooper's Weedicide and Vermin Destroyer	36·0	Arsenious Oxide As_2O_3	New Zealand Loan and Mercantile Agency, Co., Ltd., Eagle Street, Brisbane
Grey Dust	50·0 30·0	Arsenic As_2O_3 Sodium Fluosilicate	Houghton and Byrne, T. and G. Building, Albert Street, Brisbane
Kil-o-Weed	39·5	Arsenic Trioxide As_2O_3	Queensland Chemical Distributing Co., Elizabeth Street, Brisbane
Street's Cure for Ants, Bugs, Borers, Cockroaches, Flies, Ticks, &c.	5·5	Arsenic As_2O_3	Wm. Street and Son, 176 Ann Street, Brisbane
Street's Cure for Weeds, Prickly-pear, Trees, Sida Retusa, &c.	10·0	Arsenic As_2O_3	ditto
United Improved Weed Tox	40·0	Arsenious Trioxide As_2O_3	United Chemical Co., Pty., Ltd., 158-162 Grey Street, South Brisbane
United Improved Weed Tox	40·0	Arsenious Trioxide As_2O_3	Australian Estates and Mortgage Co., Ltd., Creek Street, Brisbane
Vallo Weed, Scrub, and Tree Killer	80·0	Arsenic As_2O_3	A. Victor Leggo and Co., Pty., Ltd., 72 Albert Street, Brisbane
BISULPHIDE OF CARBON.			
Bisulphide of Carbon	100·0	Carbon Bisulphide	Taylors, Elliotts, and Australian Drug Pty., Ltd. 154 Charlotte Street, Brisbane

BORDEAUX POWDER.

Comparison of the following tables with those shown in the Annual Reports for the past two years will demonstrate that a slow educational programme, spread over the years in question, has now achieved a subdivision of what were in the past known as Bordeaux powder, into Bordeaux powders (copper-lime), Burgundy powders (copper-soda), and copper sprays. Only true mixtures of copper sulphate and lime may now be sold as Bordeaux powders.

Name of Pest Destroyer.	Active Constituents as Declared by Seller.		Queensland Wholesale Dealer.
BORDEAUX POWDER (COPPER—LIME).			
Mixed Ingredients.	%		
Bordeaux Mixture (Powder)	12·5	Copper Cu=50% Sulphate of Copper	Taylors, Elliotts, and Australian Drug Pry., Ltd Charlotte Street, Brisbane
Neptune Bordeaux Powder	12·5	Copper Cu	Neptune Oil Co., Ltd., 301–307 Ann Street, Brisban
Red Comb Bordeaux Mixture	12·5	Copper Cu	Poultry Farmers' Co-op. Society, Ltd., Rom Street, Brisbane
Separate Ingriedients.			
Vallo Home-made Bordeaux (Blue Carton)	75·0 25·0	Copper Sulphate $CuSO_4\ 5H_2O$ Prepared Lime	A. Victor Leggo and Co., Pty., Ltd., 72 Alber Street, Brisbane
Vallo Home-made Bordeaux (Pink Carton)	67·0 33·0	Copper Sulphate $CuSO_4\ 5H_2O$ Prepared Lime	ditto
BURGUNDY POWDER (COPPER—SODA).			
Nil.			
(SEE ALSO COPPER SPRAYS.)			

Cattle Dip Concentrates.

Under the amended Regulations the percentage of arsenic (As_2O_3) by weight must be stated on the label.

In the following table the percentages declared have been omitted, as some of the labels still in use set out the percentages by volume, and consequently show a higher percentage than similar preparations for which percentages by weight are declared.

Name of Pest Destroyer.	Active Constituents and Rate of Dilution.	Queensland Wholesale Dealer.
Cattle Dip Concentrates.		
(a) Dilution less than 1 in 200.		
Liquid—		
Australian Liquid Dip	Arsenic (1 gallon concentrate to 160 gallons water)	Australian Disinfectant Co., Albert Street, Brisbane
Cooper's Improved Cattle Dip	Arsenic (1 gallon concentrate to 125 gallons water)	New Zealand Loan and Mercantile Agency, Co., Ltd., Eagle Street, Brisbane
Kiltic Liquid Cattle Dip	Arsenic (1 gallon concentrate to 160 gallons water)	G. Horsburgh and Co., Pty., Ltd., Kent Street, Maryborough
Kiltic Liquid Cattle Dip	Arsenic (1 gallon concentrate to 160 gallons water)	Surgical Supplies, Ltd., Queen Street, Brisbane
Krecola Liquid Cattle Dip	Arsenic (1 gallon concentrate to 160 gallons water)	Australian Chemical Co., Ltd., Donkin Street, South Brisbane
Little's Cattle Dip	Arsenic (1 gallon concentrate to 160 gallons water)	Wilcox, Mofflin, Ltd., Longland Street, Brisbane
Mactaggart's Improved Liquid Non-Scalding Cattle Dip	Arsenic (1 gallon concentrate to 160 gallons water)	Mactaggart's Primary Producers' Co-op. Association, Ltd., Eagle Street, Brisbane
No. 160 Liquid Cattle Dip	Arsenic (1 gallon concentrate to 160 gallons water)	Queensland P. P. Co-op. Association, Ltd., Creek Street, Brisbane
Non-Ox Liquid Cattle Dip	Arsenic (1 gallon concentrate to 160 gallons water)	Australian Chemical Co., Ltd., Donkin Street, South Brisbane
Queensland Cattle Dip	Arsenic (1 gallon concentrate to 160 gallons water)	Australian Machinery Co., Pty., Ltd., 371–373 Adelaide Street, Brisbane
Royal Cattle Dip	Arsenic (1 gallon concentrate to 160 gallons water)	ditto
Sidolia Liquid Cattle Dip 1–160	Arsenic (1 gallon concentrate to 160 gallons water)	Norris Agencies Pty., Ltd., 639 Ann Street, Brisbane
Standard Non-Oxidising Liquid Cattle Dip 1–160	Arsenic (1 gallon concentrate to 160 gallons water)	Queensland Chemical Distributing Co., Elizabeth Street, Brisbane
United Cattle Dip	Arsenic (1 gallon concentrate to 160 gallons water)	Australian Estates and Mortgage Co., Ltd., Creek Street, Brisbane
United Cattle Dip	Arsenic (1 gallon concentrate to 160 gallons water)	United Chemical Co., Pty., Ltd., 158 Grey Street, South Brisbane
Vallo Improved Fluid Cattle Dip	Arsenic (1 gallon concentrate to 180 gallons water)	A. Victor Leggo and Co., Pty., Ltd., 72 Albert Street, Brisbane
Paste—		
Thomas' Carbolised Cattle Wash	Arsenic (10 lb. concentrate to 175 gallons water)	James Campbell and Sons, Pty., Ltd., 12–20 Creek Street, Brisbane
Bar—		
Kiltic Cattle Dip (Bar Form)	Arsenic (2¼ lb. concentrate to 50 gallons water)	Surgical Supplies Ltd., Queen Street, Brisbane
(b) Dilution 1 in 300 and Over.		
Acco Liquid Cattle Dip	Arsenic (1 gallon concentrate to 300 gallons water)	Australian Chemical Co., Ltd., Donkin Street, South Brisbane
Austral Liquid Cattle Dip	Arsenic (1 gallon concentrate to 320 gallons water)	Taylors, Elliotts, and Australian Drug Pty., Ltd., 154 Charlotte Street, Brisbane
Australian Double Strength Liquid Dip	Arsenic (1 gallon concentrate to 320 gallons water)	Australian Disinfectant Co., Albert Street, Brisbane
Concentrated Kiltic Liquid Cattle Dip	Arsenic (1 gallon concentrate to 300 gallons water)	Surgical Supplies Ltd., Queen Street, Brisbane
Cooper's Tixol	Arsenic (1 gallon concentrate to 320 gallons water)	New Zealand Loan and Mercantile Agency Co., Ltd., Eagle Street, Brisbane
Harton Cattle Dip Fluid, Double Strength	Arsenic (1 gallon concentrate to 320 gallons water)	Chemical and Tar Products, Pty., Ltd., Lower Ann Street, Brisbane
Hayes' Cattle Dip	Arsenic (1 gallon concentrate to 300 gallons water)	Hayes' Veterinary Co., Albert House, Brisbane
Hibiscus Cattle Dip Fluid	Arsenic (1 gallon concentrate to 300 gallons water)	Queensland Pastoral Supplies, Pty., Ltd., Bowen Street, Brisbane
Little's Cattle Dip (concentrated)	Arsenic (1 gallon concentrate to 300 gallons water)	Wilcox, Mofflin, Ltd., Longland Street, Brisbane
Maxdip	Arsenic (1 gallon concentrate to 320 gallons water)	Mactaggart's P.P. Co-op. Association, Ltd., Eagle Street, Brisbane
Royal Cattle Dip (Concentrated)	Arsenic (1 gallon concentrate to 300 gallons water)	Australian Machinery Co., Pty., Ltd., 371–373 Adelaide Street, Brisbane
Sidolia Liquid Cattle Dip 1–300	Arsenic (1 gallon concentrate to 300 gallons water)	Norris Agencies Pty., Ltd., 639 Ann Street, Brisbane
Standard Non-Oxidising Liquid Cattle Dip 1–300	Arsenic (1 gallon concentrate to 300 gallons water)	Queensland Chemical Distributing Co., Elizabeth Street, Brisbane
Uccol Cattle Dip	Arsenic (1 gallon concentrate to 320 gallons water)	Australian Estates and Mortgage Co., Ltd., Creek Street, Brisbane
Uccol Cattle Dip	Arsenic (1 gallon concentrate to 320 gallons water)	United Chemical Co., Pty., Ltd., 158 Grey Street, South Brisbane
Young's Improved Cattle Dip	Arsenic (1 gallon concentrate to 320 gallons water)	Sturmfel's P.P. Co-op. Association, Ltd., Creek Street, Brisbane

Name of Pest Destroyer.	Active Constituents as Declared by Seller.	Queensland Wholesale Dealer.
Chlorate Weed Killers.		
Weedex	% 22·0 Calcium Chlorate	A.C.F. and Shirleys Fertilizers, Ltd., Little Roma Street, Brisbane
Copper Dusts.		
Sickle Brand Copper Carbonate	52·0 Copper Cu as Copper Carbonate	ditto
Copper Sprays.		
Bickford's Aero Brand Bordacide	12·5 Copper Cu as Copper Sulphate	A. M. Bickford and Sons, Ltd., Tank Street, Brisbane
Cooper's Bordinette	12·5 Copper Cu as Crystallised Copper Sulphate	Queensland Fruitgrowers' Society, Ltd., Makerston Street, Brisbane
Kwik-Kure Borda Powder	12·5 Copper Cu as Crystallised Copper Sulphate	A.C.F. and Shirleys Fertilizers, Ltd., Little Roma Street, Brisbane
Copper Sulphate.		
Australian Bluestone	24·5 Copper Cu	Neptune Oil Co., Ltd., 301 Ann Street, Brisbane
Bluestone	25·0 Copper Cu as Copper Sulphate	A.C.F. and Shirleys Fertilizers, Ltd., Little Roma Street, Brisbane
Bluestone Copper Sulphate	24·5 Copper Cu as Copper Sulphate	G. Horsburgh and Co., Pty., Ltd., Kent Street, Maryborough
Copper Sulphate	24·5 Copper Cu as Copper Sulphate	Taylors, Elliotts, and Australian Drug Pty., Ltd., 154 Charlotte Street, Brisbane
E.S.A. Copper Sulphate Bluestone	25·0 Copper Cu as Copper Sulphate	Elder, Smith, and Co., Ltd., 334 Queen Street, Brisbane
E.S.A. Dehydrated Bluestone	35·0 Copper Cu as Dehydrated Copper Sulphate	ditto
Macclesfield Bluestone	24·5 Copper Cu	Neptune Oil Co., Ltd., 301–307 Ann Street Brisbane,

Cyanide.

Under the amended Regulations preparations coming under this heading must declare on the labels the percentage of the cyanide radical (CN) that is present. This gives a definite figure of comparison for all cyanides and does away with the difficulty of declaring the active constituents of mixed cyanides as was experienced in the past.

At present we are in a transitionary stage, therefore the figures in the following table are not expressed as CN; this will be done when the labels are reprinted.

Name of Pest Destroyer.	%	Active Constituents as Declared by Seller.	Queensland Wholesale Dealer.
Cyanide.			
Calcid Briquettes	88·5	Calcium Cyanide $Ca(CN)_2$	Houghton and Byrne, T. and G. Building, Albert Street, Brisbane
Calcid Calcium Cyanide	45·0	Calcium Cyanide $Ca(CN)_2$	ditto
Cyanide of Potash	95·0	Cyanide of Potash	Noyes Bros. (Sydney), Ltd., Elizabeth Street, Brisbane
Cyanide of Potash	95·0	Cyanide of Potash	Taylors, Elliotts, and Australian Drug Pty., Ltd., 154 Charlotte Street, Brisbane
Sodium Cyanide	98·0	Sodium Cyanide	G. Horsburgh and Co., Ltd., Kent Street, Maryborough
Derris Preparations.			
C.O.D. Derris Root Dust	0·5	Rotenone as Derris Root	Committee of Direction of Fruit Marketing, Turbot Street, Brisbane
Cooper's Katakilla	3·0	Tuba Toxin and Allied Substances	Queensland Fruitgrowers' Society, Ltd., Makerston Street, Brisbane
Derridust	2·5	Tuba Toxin as Derris Pulv.	Houghton and Byrne, T. and G. Building, Albert Street, Brisbane
Fleezit	1·0	Rotenone as Derris	Insecticides Pty., 101 Queen Street, Brisbane
K.F.	2·5	Tuba Toxin as Derris Pulv.	Houghton and Byrne, T. and G. Building, Albert Street, Brisbane
Pulvex Vermin Powder	2·5	Tuba Toxin and Allied Substances	New Zealand Loan and Mercantile Agency, Co., Ltd., Eagle Street, Brisbane
Red Comb Non-Poisonous Dusting Powder	2·5	Tuba Toxin from Derris Root	Poultry Farmers' Co-op. Society, Ltd., Roma Street, Brisbane
Dusting Mixtures.			
A.C.F. Kwik-Kure Dusts—			
Blight Dust	10·0	Sulphur S as Sublimed Sulphur	A.C.F. and Shirleys Fertilizers, Ltd., Little Roma Street, Brisbane
	10·4	Copper Cu as Copper Carbonate	
Copper Sulphate Dust	6·5	Copper Cu as Dehydrated Copper Sulphate	ditto
Grape Dust	60·0	Sulphur S as Sublimed Sulphur	ditto
	7·8	Copper Cu as Copper Carbonate	
Grub and Aphis Dusts	7·75	Arsenic Pentoxide As_2O_5 as Arsenate of Lead	ditto
	2·0	Nicotine as Nicotine Sulphate	
40 Per Cent. Grub Dust	12·4	Arsenic Pentoxide As_2O_5 as Arsenate of Lead	ditto
Grub Dust	7·75	Arsenic Pentoxide As_2O_5 as Lead Arsenate	ditto
Nicotine Dust	2·0	Nicotine as Nicotine Sulphate	ditto
Special Grub Dust	15·5	Arsenic Pentoxide As_2O_5 as Lead Arsenate	ditto
Tomato and Melon Dust	7·5	Arsenic Pentoxide As_2O_5 as Lead Arsenate	ditto
	40·0	Sulphur S as Sublimed Sulphur	
	5·2	Copper Cu as Copper Carbonate	
Clou-Dust—			
Blight Dust	5·0	Copper Cu as Copper Sulphate	Clou-Dust Spray Manufacturers, 152 Stanley Street, South Brisbane
	10·0	Sulphur S as Ground Sulphur	
C.D. 50	15·5	Arsenic Pentoxide As_2O_5 as Arsenate of Lead	ditto
Cabbage Dust Special	21·5	Arsenic Pentoxide As_2O_5 as Arsenate of Lead	ditto
	2·5	Copper Cu as Copper Sulphate	
Nicotine Dust Special	2·5	Nicotine as Nicotine Sulphate	ditto
	0·3	Nicotine as Tobacco Powder	
Tomato Dust Special	5·0	Copper Cu as Copper Sulphate	ditto
	10·0	Sulphur S as Ground Sulphur	
	12·2	Arsenic Pentoxide As_2O_5 as Arsenate of Lead	
Fluorine Insecticides.			
Dutox	80·0	Barium Silico Fluoride	A.C.F. and Shirleys Fertilizers, Ltd., Little Roma Street, Brisbane
Formalin.			
Bickford's Formalin	40·0	By Volume, Formaldehyde	A. M. Bickford and Sons, Ltd., Tank Street, Brisbane
C.O.D. Formalin	40·0	By Volume, Formaldehyde	Committee of Direction of Fruit Marketing, Turbot Street, Brisbane
Liquid Formaldehyd B.P.	36·0	By Weight, Formaldehyde	Taylors, Elliotts, and Australian Drug Pty., Ltd., 154 Charlotte Street, Brisbane
Fumigants (not Elsewhere Included).			
Fumex	100·0	Ethylene Dichloride	E. G. Roper, care of S. W. Peterson Co., Ltd., Albert House, Brisbane
Fungicides (not Elsewhere Included).			
Shirlan A. G.	25·0	Salicylanilide	A.C.F. and Shirleys Fertilizers, Ltd., Little Roma Street, Brisbane
Shirlan R. A.	8·5	Salicylanilide	ditto
Glue Sprays.			
Davis Spraying Glue Pearls	99·0	Specially Prepared Glue	Davis Gelatine (Aust.) Ltd., 459 Adelaide Street, Brisbane
Iron Sulphate.			
Ferr. Sulp. B.P. Ferrous Sulphate	95·0	Ferrous Sulphate $FeSO_4\ 7H_2O$	Taylors, Elliotts, and Australian Drug Pty., Ltd., 154 Charlotte Street, Brisbane
Sulphate of Iron	19·7	Iron Fe.	A.C.F. and Shirleys Fertilizers, Ltd., Little Roma Street, Brisbane
Sulphate of Iron	20·0	Iron Fe.	Neptune Oil Co., Ltd., 301–307 Ann Street, Brisbane

Name of Pest Destroyer.	Active Constituents as Declared by Seller.		Queensland Wholesale Dealer.
Lime Sulphur.	%		
A.C.F. Lime Sulphur Solution	16·0	Polysulphide Sulphur	A.C.F. and Shirleys Fertilizers, Ltd., Little Roma Street, Brisbane
C.O.D. Special Lime Sulphur Concentrated Liquid Spray	16·0	Polysulphide Sulphur	The Committee of Direction of Fruit Marketing, Turbot Street, Brisbane
F.D.L. Lime Sulphur Solution	16·0	Polysulphide Sulphur	Fertiliser Distributers, Pty., Ltd., Little Roma Street, Brisbane
Neptune Lime Sulphur Spraying Solution	16·0	Polysulphide Sulphur	Neptune Oil Co., Ltd., 301 Ann Street, Brisbane
Q.F.S. Pure Lime Sulphur Solution	16·0	Polysulphide Sulphur	Queensland Fruitgrowers' Society, Ltd., Makerston Street, Brisbane
Nicotine and Nicotine Compounds.	%		
Pestend Tobacco Dust	1·0	Nicotine	W. D. and H. O. Wills (Aust.), Ltd., Ann Street Brisbane
Nicotine Sulphate.			
Black Leaf 40	40·0	Nicotine	Neptune Oil Co, Ltd., 301–307 Ann Street, Brisbane
Britnico Nicotine Sulphate	40·0	Nicotine	ditto
Kwik-Kure Nicotine Sulphate 40	40·0	Nicotine	A.C.F. and Shirleys Fertilizers, Ltd., Little Roma Street, Brisbane
Nicotine Sulphate	40·0	Nicotine	Fertiliser Distributers Pty., Ltd., Little Roma Street, Brisbane
Vallo Brand Nicotine Sulphate	40·0	Nicotine	A. Victor Leggo and Co., Pty., Ltd., 72 Albert Street, Brisbane
Paradichlorobenzene.			
Antox	60·0	Dichlorobenzene	Insecticides Pty., 101 Queen Street, Brisbane
Cimex	12·0	Dichlorobenzene	ditto
Paradichlorobenzene	100·0	Paradichlorobenzene	A.C.F. and Shirleys Fertilizers, Ltd., Little Roma Street, Brisbane
Paris Green.			
C.O.D. Genuine Paris Green	55·0	Arsenic Trioxide As_2O_3	Committee of Direction of Fruit Marketing, Turbot Street, Brisbane
	1·25	Maximum Water Soluble Arsenic As_2O_3	
Paris Green	55·0	Arsenic Trioxide As_2O_3	A.C.F. and Shirleys Fertilizers, Ltd., Little Roma Street, Brisbane
Paris Green	55·0	Arsenic Trioxide As_2O_3	A. M. Bickford and Sons, Ltd., Tank Street, Brisbane
	3·5	Maximum Water Soluble Arsenic As_2O_3	
Paris Green	55·0	Arsenic Trioxide As_2O_3	Taylors, Elliotts, and Australian Drug Pty., Ltd., 154 Charlotte Street, Brisbane
	3·5	Maximum Water Soluble As_2O_3	
Paris Green Powder	55·0	Arsenic Trioxide As_2O_3	G. Horsburgh and Co., Pty., Ltd., Kent Street, Maryborough

Phenolic Preparations.

It should be noted that the Regulations under the Act require an actual percentage to be stated on the label, such percentage to be considered as a minimum. In the case of these preparations the words "maximum" or "not more than" should not be used if the material is intended for uses which bring it under the Pest Destroyers Act.

Name of Pest Destroyer.	Active Constituents as Declared by Seller.		Queensland Wholesale Dealer.
Phenolic Preparations.	%		
Acco 15/20 Disinfectant	15·0	Tar Acids	Australian Chemical Co., Ltd., Donkin Street, South Brisbane
Carbolacene	9·0	Phenols	H. H. Raine, 32 Heusslar Terrace, Milton, Brisbane
C.N. Disinfectant	27·0	Phenol	Australian Disinfectant Co., 83–85 Albert Street, Brisbane
C.N. Disinfectant	2·5	Cresols	Norris Agencies Pty., Ltd., 639 Ann Street, Brisbane
Irving's Soluble Phenyle	2·0	Phenols	John Irving and Sons, London Works, Mayne, Brisbane
Irving's Soluble Phenyle	5·0	Phenols	ditto
Kerol Disinfectant	31·0	Tar Acids	Dalgety and Co., Ltd., Elizabeth Street, Brisbane
Kreola 1 Disinfectant	20·0	Tar Acids	Australian Chemical Co., Ltd., Donkin Street, South Brisbane
Morrison's Soluble Phenol	16·0	Tar Acids	H. Deakin, 24 Ryan House, Charlotte Street, Brisbane
Morrison's Spirits of Tar	10·0	Tar Acids	ditto
Soluble Phenyle	3·0	Tar Acids	A. M. Bickford and Sons, Ltd., Tank Street, Brisbane
Phosphorous Pastes.			
Ausoline Rat and Mice Exterminator	0·004	Phosphorous	Walter Lowe, Federation Street, Windsor
	0·03	Arsenic	
Byrne's Electric Paste	0·6	Phosphorous	Houghton and Byrne, T. and G. Building, Albert Street, Brisbane
Phosphorous Paste	1·3	Phosphorous	Wm. Street and Son, 176 Ann Street, Brisbane
Rat Death	1·9	Phosphorous	Taylors, Elliotts, and Australian Drug Pty., Ltd., 154 Charlotte Street, Brisbane
Rat Doom	1·3	Phosphorous	ditto
S.A.P. Rabbit Poison	4·5	Phosphorous	New Zealand Loan and Mercantile Agency Co., Ltd., Eagle Street, Brisbane
W.A.R.P. (Wallace's Australian Rabbit Poison)	5·0	Phosphorous	The Australian Rabbit Poison Co., Annerley Road, South Brisbane

Pyrethrum.

Preparations coming under this heading when claiming on the label "household uses only" do not come under the Pest Destroyers Act. Some of these materials are at present used for household purposes only, but claims are made on the labels which bring them under the Act. The deletion of these claims, when reprinting is carried out, would remove them from its ambit.

Sheep Dips, Arsenical and/or Jetting Preparations.

Under the amended Regulations the percentage of arsenic (As_2O_3) by weight must be stated on the label.

In the following table the percentages declared have been omitted as some of the labels still in use set out the percentages by volume, and consequently show a higher percentage than similar preparations for which percentages by weight are declared.

Name of Pest Destroyer.	Active Constituents and Rate of Dilution.	Queensland Wholesale Dealer.
Sheep Dips Arsenical.		
Liquid.		
Century Sheep Dip	Arsenic As_2O_3 Cresylic Acid (Dipping—1 gallon concentrate to 300 gallons water)	McGlew and Co., Ryan House, Charlotte Street, Brisbane
Cubba Sheep Dip Blowfly Specific	Arsenic As_2O_3 (Dipping—1 gallon concentrate to 77 gallons water) (Jetting—1 gallon concentrate to 20 gallons water)	Tom Brown, Bullamon, Thallon
Hart's Immunol Arsenical Fluid Sheep Dip	Arsenic As_2O_3 Cresols (Dipping—1 gallon concentrate to 250 gallons water)	James Hardie Trading Co., Ltd., Elizabeth Street, Brisbane
Mactaggart's Liquid Arsenical Sheep Dip	Arsenious Trioxide As_2O_3 (Dipping—1 gallon concentrate to 150 gallons water)	Mactaggart's P.P. Co-op. Association, Ltd., Eagle Street, Brisbane
Standard Sheep Dip	Arsenic As_2O_3 (Dipping—1 gallon concentrate to 150 gallons water)	Queensland Chemical Distributing Co., Elizabeth Street, Brisbane
United Sheep Dip No. 1, Liquid Arsenical	Arsenic As_2O_3 (Dipping—1 gallon concentrate to 150 gallons water) (Jetting—1 gallon concentrate to 43 gallons water)	United Chemical Co., Ltd., 158 Grey Street, South Brisbane
Paste.		
Vac Dip Arsenical Sheep Dip	Arsenic As_2O_3 Phenol (Dipping—10 lb. concentrate to 75 gallons water. Jetting—10 lb. concentrate to 20 gallons water)	Vacuum Oil Co., Pty., Ltd., Eagle Street, Brisbane
Bar.		
Kiltie Sheep Dip, Bar Form	Arsenic Trioxide As_2O_3 (Dipping—2¼ lb. concentrate to 50 gallons water. Jetting—2¼ lb. concentrate to 14 gallons water)	Surgical Supplies, Ltd., Queen Street, Brisbane
Powder.		
Austral Sheep Dip Powder	Arsenic Trioxide As_2O_3 Sulphur (Dipping—25 lb. concentrate to 250 gallons water)	Taylors, Elliotts, and Australian Drug Pty., Ltd., 154 Charlotte Street, Brisbane
Cooper's Sheep Dipping Powder	Arsenic As_2O_3 Sulphur (Dipping—10 lb. ½ oz. concentrate to 100 gallons water)	New Zealand Loan and Mercantile Agency Co., Ltd., Eagle Street, Brisbane
Edward's Sheep Dipping Powder	Arsenic Trioxide As_2O_3 (Dipping—10 lb. concentrate to 100 gallons water)	Goldsbrough, Mort, and Co., Ltd., Eagle Street, Brisbane
Little's Powder Sheep Dip	Arsenic Trioxide As_2O_3 (Dipping—10 lb. concentrate to 100 gallons water)	Wilcox, Mofflin, Ltd., Longland Street, Brisbane
Quibell's Powder Sheep Dip	Arsenious Trioxide As_2O_3 (Dipping—11 lb. 4 oz. concentrate to 100 gallons water)	Dalgety and Co., Ltd., Elizabeth Street, Brisbane
Vallo Powder Sheep Dip	Arsenic As_2O_3 (Dipping—10 lb. concentrate to 100 gallons water)	A. Victor Leggo and Co., Pty., Ltd., 72 Albert Street, Brisbane
Young's Sheep Dip Powder	Arsenic As_2O_3 (Dipping—10 lb. concentrate to 115 gallons water. Jetting—10 lb. concentrate to 30 gallons water)	Sturmfels P.P. Co-op. Association, Ltd., 138 Creek Street, Brisbane
Jetting Fluids (*see* also Sheep Dips Arsenical).		
Harton Jetting Fluid	Arsenic As_2O_3 (Jetting—1 gallon concentrate to 100 gallons water)	Chemical and Tar Products Pty., Ltd., Lower Ann Street, Brisbane
Kreeola Jetting Fluid	Arsenic As_2O_3 (Jetting—2 gallons concentrate to 100 gallons water)	Australian Chemical Co., Ltd., Donkin Street, South Brisbane
United Arsenical Jetting Fluid	Arsenious Trioxide As_2O_3 Cresols (Jetting—1½ gallons concentrate to 100 gallons water)	Australian Estates and Mortgage Co., Ltd., Eagle Street, Brisbane

Name of Pest Destroyer.	Active Constituents as Declared by Seller.		Queensland Wholesale Dealer.
SPRAYING OILS AND EMULSIONS—*continued.*	%		
Irving's Prepared Soluble Red Spraying Emulsion	62·0	Kerosene	John Irving and Sons, London Works, Mayne, Brisbane
Neptune Prepared Crude Spraying Oil	83·0	Crude Petroleum Oil	Neptune Oil Co., Ltd., 301–307 Ann Street, Brisbane
Neptune Prepared Red Spraying Oil, A	85·0	Mineral Oil	ditto
Neptune Prepared Spraying Oil, C	65·0 7·5	Mineral Oil Cresylic Acid	ditto
Neptune Prepared White Spraying Oil	82·0	Mineral Oil	ditto
Q.F.S. Red Spraying Oil	80·0 5·5	Mineral Oils Tar Acids	Queensland Fruitgrowers' Society, Ltd., Makerston Street, Brisbane
Shell P.C.S.	83·0	Crude Petroleum	Shell Co. of Australia, Ltd., 301–307 Ann Street, Brisbane
Shell Red Spray	85·0	Petroleum Oil	ditto
Shell White Spray	82·0	Refined Petroleum Oil	ditto
Shellicide D	82·0	Refined Petroleum Oil	ditto
United Red Oil Spray	75·0 7·0	Mineral Oil Cresylic Acid	United Chemical Co., Pty., Ltd., 158–162 Grey Street, South Brisbane
Vallo Benzol Emulsion	30·0	Benzol	A. Victor Leggo and Co., Pty., Ltd., 72 Albert Street, Brisbane
Vallo Prepared White Oil	89·0	Mineral Oil	ditto
Vallo Red Spraying Oil	89·0	Red Oil	ditto
Volck	80·0	Refined Petroleum Oils	A.C.F. and Shirleys Fertilizers, Ltd., Little Roma Street, Brisbane
SQUILL.			
Squill Tox	100·0	Red Squill	Houghton and Byrne, T. and G. Building, Albert Street, Brisbane
STRYCHNINE.			
Wellcome Strychnine B.P.	..	Strychnine	Denham Bros. (Rockhampton), Pty., Ltd., East Street, Rockhampton
Pure Strychnine (Jacob Hulle)	..	Strychnine	New Zealand Loan and Mercantile Agency, Co., Ltd., Eagle Street, Brisbane
Pure Strychnine (Jacob Hulle)	..	Strychnine	Taylors, Elliotts, and Australian Drug Pty., Ltd., 154 Charlotte Street, Brisbane
Strychnine Cryst (T. and H. Smith Ltd.)	..	Strychnine	Denham Bros. (Rockhampton), Pty., Ltd., East Street, Rockhampton
SULPHUR.			
Ground.			
Australian Ground Sulphur	99·0	Ground Sulphur	Neptune Oil Co., Ltd., 301–307 Ann Street, Brisbane
Powdered Sulphur	98·0	Sulphur	A.C.F. and Shirleys Fertilizers, Ltd., Little Roma Street, Brisbane
Powdered Sulphur	99·5	Sulphur	G. Horsburgh and Co., Pty., Ltd., Kent Street, Maryborough
Sicilian Ground Sulphur	99·0	Ground Sulphur	Neptune Oil Co., Ltd., 301–307 Ann Street, Brisbane
Sublimed.			
Sicilian Sublimed Flowers of Sulphur	99·0	Sublimed Sulphur	Neptune Oil Co., Ltd., 301–307 Ann Street, Brisbane
Sublimed Flowers of Sulphur	100·0	Sulphur	A.C.F. and Shirley's Fertilizers, Ltd., Little Roma Street, Brisbane
Sulphur Sublim B.P., Sublimed Sulphur	100·0	Sublimed Sulphur	Taylors, Elliotts, and Australian Drug, Pty., Ltd. 154 Charlotte Street, Brisbane
Precipitated.			
Neptune Precipitated Sulphur	99·0	Precipitated Sulphur	Neptune Oil Co., Ltd., 301–307 Ann Street, Brisbane
Vallo Brand Atomised Sulphur	50·0	Precipitated Sulphur	A. Victor Leggo and Co., Pty., Ltd., 72 Albert Street, Brisbane
Colloidal.			
Cooper's Colloidal Sulphur	50·0	Sulphur	Queensland Fruitgrowers' Society, Ltd., Makerston Street, Brisbane
Cosan Colloidal Liquid Sulphur	50·0	Sulphur	E. G. Roper, care of S. W. Peterson, Co., Ltd., Albert House, Brisbane
THALLIUM PREPARATIONS.			
A.C.F. Thallium Sulphate Bait	0·05	Thallium Tl. as Thallium Sulphate	A.C.F. and Shirleys Fertilizers, Ltd., Little Roma Street, Brisbane
MISCELLANEOUS.			
Ammon Cent.	16·0 0·2 0·2	Ammonia as Ammonium Carbonate and Allied Compounds Sulphur S as Hydrogen Sulphide and Allied Compounds Tar Acids	Townsville Gas and Coke Co., Ltd., Hanran Street, Townsville

Sheep Dips (Phenolic).

The standard for these preparations is now "phenolic compounds, when calculated as cresylic acid, not less than 16 per cent."

This has necessitated the alteration of the formulæ of several of these dips that have been marketed in the past with a lower guarantee than that stated above.

The fixing of such a standard eliminates the paying of freight on an unproportionately large amount of water or other dilutent.

Name of Pest Destroyer.	Active Constituents as Declared by Seller.		Queensland Wholesale Dealer.
Sheep Dips (Phenolic)	%		
Cooper's Milk Oil Fluid Sheep Dip	18·0	Phenols and Cresols	New Zealand Loan and Mercantile Agency Co., Ltd., Eagle Street, Brisbane
Hibiscus Phenolic Sheep Dip	20·0	Tar Acids	Queensland Pastoral Supplies, Pty., Ltd., Bowen Street, Brisbane
Kreola Sheep Dip	20·0	Tar Acids	Australian Chemical Co., Ltd., Donkin Street, South Brisbane
Kreeola Sheep Dip	20·0	Tar Acids	ditto
Little's Improved Fluid Dip	19·0	Tar Acids	Wilcox, Mofflin, Ltd., Longland Street, Brisbane
Mactaggart's Special Phenolic Sheep Dip	20·0	Tar Acids	Mactaggart's P.P. Co-op. Association, Ltd., Eagle Street, Brisbane
Morrison's Phenolic Sheep Dip	16·0	Phenols and Cresols	H. Deakin, Ryan House, Charlotte Street, Brisbane
Quibell's Liquid Sheep Dip	18·0	Tar Acids	A. M. Bickford and Sons, Ltd., Tank Street, Brisbane
Quibell's Liquid Sheep Dip	18·0	Tar Acids	Dalgety and Co., Ltd., Elizabeth Street, Brisbane
Royal Sheep Dip Liquid, Improved	18·0	Cresols	Australian Machinery Co., Pty., Ltd., 371–373 Adelaide Street, Brisbane
Standard Sheep Dip	20·0	Tar Acids	Queensland Chemical Distributing Co., Elizabeth Street, Brisbane
United Sheep Dip No. 2	20·0	Tar Acids	United Chemical Co., Pty., Ltd., 158–162 Grey Street, South Brisbane
Vallo Fluid Sheep Dip	18·0	Tar Acids	A. Victor Leggo and Co., Pty., Ltd., 72 Albert Street, Brisbane
Sheep Preparations.			
Acco Fly Blow Dressing	80·0	Tar Oils	Australian Chemical Co., Ltd., Donkin Street, South Brisbane
Austral Blow Fly Dressing Oil	2·5	Eucalyptus Oil	Taylors, Elliotts, and Australian Drug Pty., Ltd., 154 Charlotte Street, Brisbane
	2·5	Dichlorobenzene	
Campbell's Famous Mananga Spraying Oil	15·0	Carbolic Acid	E. J. Rees and Co., Ferry Street, Indooroopilly, Brisbane
	0·5	Formaldehyde	
Campbell's Improved Fly Blow Dressing Oil	4·0	Phenols	Campbell Bros., Pty., Ltd., Bowen Hills, Brisbane
Carradale Oil	8·0	Carbolic Acid	E. J. Rees and Co., Ferry Street, Indooroopilly, Brisbane
	0·5	Formaldehyde	
Century Fly Oil	4·0	Cresylic Acid	McGlew and Co., Ryan House, Charlotte Street, Brisbane
	4·0	Eucalyptus	
Deignan's Blow Fly Destroyer	9·0	Tar Acids	E. J. Deignan, Tarus, Stafford Road, Kedron, Brisbane
Eastman's Policeman Fly Sheep Spraying Soap	30·0	Arsenic Trioxide As_2O_3	H. R. Eastman, Cunnamulla
Ess-Ess Lamb Fly Blow Dressing Oil	4·0	Phenols	Surgical Supplies, Ltd., Queen Street, Brisbane
	4·0	Carbon Tetrachloride	
Ess-Ess Sheep Fly Blow Dressing Oil	4·0	Phenols	ditto
Fleeco	75·0	Tar Oils	Queensland Chemical Distributing Co., Elizabeth Street, Brisbane
	2·0	Cresols	
Harton Blow Fly Dressing	5·0	Phenols and Cresols	Chemical and Tar Products Pty., Ltd., Lower Ann Street, Brisbane
Hart's Immunol Blow Fly Dressing	1·4	Arsenic As_2O_3	James Hardie Trading Co., Ltd., Elizabeth Street, Brisbane
	16·0	Phenols and Cresols	
	52·8	Oils—Tar, Eucalyptus, and Mineral	
Hibiscus Blow Fly Fluid	5·0	Phenols and Cresols	Queensland Pastoral Supplies, Pty., Ltd., Bowen Street, Brisbane
Kleenflox	47·0	Mineral Oil	Taubman's Queensland Pty., Ltd., 95 Edward Street, Brisbane
	4·0	Eucalypti Oleum	
Kreeola Fly Blow Dressing	80·0	Tar Oils	Australian Chemical Co., Ltd., Donkin Street, South Brisbane
Mactaggart's Antiseptic Sheep Fly Oil	80·0	Tar Oils	Mactaggart's P.P. Co-op. Association, Ltd., Eagle Street, Brisbane
Morrison's Fly Blown Sheep Oil	4·0	Tar Acid	H. Deakin, Ryan House, Charlotte Street, Brisbane
Neptune Blow Fly Sheep Oil	5·0	Carbolic Acid	Neptune Oil Co., Ltd., 301–307 Ann Street, Brisbane
Policeman Fly Oil	4·0	Phenols	H. R. Eastman, Cunnamulla
Shell Defiance Blow Fly Oil	2·95	Phenolic Compounds in Carbolic Oil	Shell Co. of Australia, Ltd., 301–307 Ann Street, Brisbane
Squatter Blow Fly Sheep Oil	2·9	Carbolic Acid	Neptune Oil Co., Ltd., 301–307 Ann Street, Brisbane
Vallo Blow Fly Oil	0·5	Arsenic As_2O_3	A. Victor Leggo and Co., Pty., Ltd., 72 Albert Street, Brisbane
Woollo	80·0	Tar Oils	Australian Estates and Mortgage Co., Ltd., Creek Street, Brisbane
Spraying Oils and Emulsions.			
Clarifol	82·0	Mineral Oil	Neptune Oil Co., Ltd., 301–307 Ann Street, Brisbane
C.O.D. Improved Red Oil	75·0	Mineral Oil	Committee of Direction of Fruit Marketing, Turbot Street, Brisbane
	7·0	Cresylic Acid	
Cooper's Alboleum	80·0	Hydrocarbon Oil	Queensland Fruitgrowers' Society, Ltd., Makerston Street, Brisbane
Cooper's Ovicide Tar Oil	48·0	Tar Oils	ditto
	10·0	Phenols	
	20·0	Mineral Oils	
F.D.L. White Oil	82·0	Mineral Oil	Fertiliser Distributers, Pty., Ltd., Little Roma Street, Brisbane
Gargoyle Red Spraying Oil	85·0	Mineral Oil	Vacuum Oil Co., Pty., Ltd., Eagle Street, Brisbane
Gargoyle White Spraying Oil	80·0	White Oil	ditto

Veterinary Medicines Act, 1934-1935.

The following table sets out particulars relative to the operations of the Act from 1st July, 1934, to 30th June, 1935:—

	July to December, 1934.	January to June, 1935.	Twelve Months Total.
Licenses—			
Issued	76	327	403
Refused	..	1	1
Registrations—			
Renewed	..	275	503
New	166	62	
Pending	..	101	101
Samples received from buyers	..	1	1
Board meetings	10	9	19

A considerable number of the sixty-two new registrations were due to alterations of the formulæ.

The Veterinary Medicines Act has tightened up the Stock Foods and Pest Destroyers Act in a way that was not foreseen. Now, in many cases, if the seller avoids the ambit of one Act by claiming uses for his materials that exempt them from the operations of the Act in question, these uses bring it under one of the other Acts.

During the first year the Act was in force a large number of applications for registration were refused; naturally this number is now very considerably reduced. It is, however, impossible to show the true position inasmuch as no record is kept of the inquiries received from time to time, as to the requirements of registration, many of which inquiries are not heard of again. Particularly does this type of inquirer dislike to state his formulæ, whereas firms of repute in England, U.S.A., and Australia have given every assistance in complying with the Act's requirements; all they ask is that their formulæ be treated as strictly confidential. In view of the value attached to some of these formulæ, facilities have been made so that such may be forwarded directly by the manufacturers to the Secretary of the Veterinary Medicines Board, Department of Agriculture and Stock, Brisbane.

In this case the Queensland wholesale or primary dealer lodges the necessary forms, &c., and on the statutory declaration he indicates that—

> "The constituents and quantity of each drug and ingredient are as set out on the statutory declaration lodged with the Secretary of the Veterinary Medicines Board by..... on or about....."

Further it has been decided that once a veterinary medicine has been registered in accordance with Section 6 of the Act it shall not be necessary in subsequent years to again submit a sample unless the constituents and/or percentage of such are altered; providing that a sample shall be forwarded on demand without payment.

After one year's experience with the administration of the Act it was found that certain modifications and additions were required to the existing Regulations, with the result that amending Regulations were gazetted on 29th November, 1934. In the main such amendment provided that—

> "In the case of any liquid veterinary medicine having or claiming to have germicidal and/or disinfecting properties, its bactericidal efficiency expressed in terms of absolute phenol (100 per cent.) as determined by the Rideal-Walker test, shall be stated on the label";

and

> "Veterinary medicines consisting of or containing any of the following substances:—Carbon tetrachloride, tetrachlorethylene, trichlorethylene—shall bear on the first line of every label attached thereto, the word "POISON" in red letters on a white ground, in larger and heavier type than any other letter on the label; and no other letter shall appear on the same line. No other letter on the label shall be in a red colour. They shall be packed in accordance with the Health Act and Regulations thereunder for the time being in force in Queensland, relating to the packing of poisonous substances."

Also the necessary forms were simplified; tetrachlorethylene and trichlorethylene were added to Schedule II.

Contagious Abortion.

A few applications have been received covering a claim for the cure contagious abortion; the labels have in each case been altered by the direction of the Board to delete all reference to the words "cure" and "contagious" and to refer to treatment of abortion in the past tense only—i.e., "after abortion."

In one case the applicant refused to place his material before the Board for consideration; naturally his material could not be registered and was removed from the Queensland market.

Early this year the following communication addressed to the Veterinary Medicines Board was received from a dispensing chemist situated in a prominent dairy centre:—

> "I think your Department deserves great credit for your services, not only to the man on the land, but to the person who is trying to give him a fair deal, for the efficient manner in which you have stopped the sales of quack medicines is remarkable."

The following tables set out lists of the Veterinary Medicines registered.

VETERINARY MEDICINES, 1935.

VETERINARY MEDICINES PURPORTING TO COMPLY WITH SECTION SIX OF THE VETERINARY MEDICINES ACT.

Queensland Wholesale Dealer.	Sold Under the Name of—	In Cases where the Queensland Wholesale Dealers obtain their supplies from sources outside of this State, the names of the Manufacturers or Suppliers are given.
A.C.F. and Shirleys Fertilizers Ltd., Little Roma Street, Brisbane	Andrew Dryden's Famous Blood and Water Powders	Manufactured in Queensland
	Andrew Dryden's Famous Embrocation for Horses and Cattle	ditto
	Andrew Dryden's Famous Gripe Drench for Horses and Cattle	ditto
	Andrew Dryden's Famous Liquid Blister for Horses and Cattle	ditto
	Andrew Dryden's Famous Scour in Calves	ditto
	Andrew Dryden's Famous Specific for Horses and Cattle	ditto
	Andrew Dryden's Famous Worm and Condition Powders for Horses and Cattle	ditto
	Dairy Ointment	ditto
	Dryden's Cleansing Drench for Cattle	ditto
	Dryden's Gall Cure for Horses and Cattle	ditto
	Dryden's Invaluable Specific for Warts	ditto
Animal Health Station, Yeerongpilly	Blackleg Vaccin (Double)	Manufactured in Queensland
	Contagious Mammitis Vaccine	ditto
	Natural Pleuro Virus	ditto
J. Armitstead, Warwick	Mawson's Horse Blister	Manufactured in Queensland
	Sheep Drench	ditto
The Australian Chemical Co., Ltd., Donkin Street, South Brisbane	Acco Tetrachloride Drench	Manufactured in Queensland
	Kreeola Tetrachloride Drench	ditto
	Savol	ditto
	Special Sedative Drench (Double Strength)	ditto
A. M. Bickford and Sons, Ltd., Tank Street, Brisbane	Bone Radiol	The Radiol Co., London, England
	Radiol	ditto
	Radiol Kidney Powder	ditto
	Radiol Leg Wash Powder	ditto
B.P.H. Products, Queensland, 27 Arthur Street, Toowoomba	Egg-Gel	Manufactured in Queensland
Bryce Ltd., 134 Adelaide Street, Brisbane	Bio Blackleg Pellets	Biological Institute of Aust., Ltd., Sydney, N.S.W.
	Pegasol	Elliotts and Australian Drug Co., Ltd., Sydney, N.S.W.
	Pegasus Blackleg Aggressin (Liquid)	Biological Institute of Aust., Ltd., Sydney, N.S.W.
	Pegasus Gall Cure	Elliotts and Australian Drug Co., Ltd., Sydney, N.S.W.
	Pegasus Mammitis Toxiculture	Biological Institute of Aust., Ltd., Sydney, N.S.W.
	Pegasus Stock Drench (Concentrated)	Elliotts and Australian Drug Co., Ltd., Sydney, N.S.W.
	Pegasus Vaginitis Capsules	ditto
	Pegasus Worm Drench for Horses	ditto
	Pegavo	ditto
Edward Butler and John Brush, 432 Queen Street, Brisbane	Hagley's Hopple Chafe (Blue Lotion)	George Hagley, Melbourne, Vic.
Cramsie Dwyer and Co., Wallangarra	Cupiss Aromatic Physic Balls	Francis Cupiss, Ltd., Norfolk, England
	Cupiss Constitution Balls	ditto
	Cupiss Embrocation	ditto
	Cupiss Tonic Powders	ditto
O. P. Cray, 151 Wickham Street, Brisbane	Puppy Worm Syrup	Manufactured in Queensland
Dalgety and Co., Ltd., Elizabeth Street, Brisbane	Sayer's Green Seal Drench (Single)	Sayer's Allport Pty., Ltd., Sydney, N.S.W.
	Sayer's Green Seal Drench (Double)	ditto

VETERINARY MEDICINES, 1935—*continued.*

VETERINARY MEDICINES PURPORTING TO COMPLY WITH SECTION SIX OF THE VETERINARY MEDICINES ACT—*continued.*

Queensland Wholesale Dealer.	Sold Under the Name of—	In Cases where the Queensland Wholesale Dealers obtain their supplies from sources outside of this State, the names of the Manufacturers or Suppliers are given.
Denhams Pty., Ltd., Roma Street, Brisbane	Chickhealth	Poultry Newspaper Co., Sydney, N.S.W.
	Poultry's Canker Paint	ditto
	Poultry's Eye Roup Cure	ditto
	Poultry's Great Bronchial Remedy	ditto
	Poultry's Iron Tonic Mixture	ditto
	Poultry's Scaley Leg Ointment	ditto
	Poultry's Special Roup Cure	ditto
	Wondertone	ditto
Victor Dryden, 10 William Street, Lutwyche	Gall Ointment for Horses and Cattle	Manufactured in Queensland
	Victor Dryden's Blood and Water Powders for Horses and Cattle	ditto
	Victor Dryden's Embrocation for Horses and Cattle	ditto
	Victor Dryden's Gripe Drench for Horses and Cattle	ditto
	Victor Dryden's Liquid Blister for Horses and Cattle	ditto
	Victor Dryden's Poultry Specific for Warts on Poultry	ditto
	Victor Dryden's Scour in Calves	ditto
	Victor Dryden's Specific for Horses and Cattle	ditto
	Victor Dryden's Worm and Condition Powders for Horses and Cattle	ditto
Evans Product Agency, Butler House, Queen Street, Brisbane	Evan's Scour Cure	Manufactured in Queensland
Hubert Finney and Ure Pty., Ltd., 244 Charlotte Street, Brisbane	Karswood Dog Condition Powders	E. Griffiths Hughes, Manchester, England
	Karswood Poultry Spice	ditto
L. W. Finney, Market Street, Brisbane	Telson Fluke Drench	Telson Manufacturing Co., Pty., Ltd., Richmond, Vic.
	Telson General Purpose Drench	ditto
	Telson Poultry Powder	ditto
Hamilton, Pty. (Q.) Ltd., 92 Adelaide Street, Brisbane	Blakemere Alterative Mixture	Hamilton, Pty., Ltd., Sydney, N.S.W.
	Blakemere Dusting Powder	ditto
	Blakemere Eczema Cure	ditto
	Blakemere Pad Paint	ditto
	Hamilton Fistula Vaccine	ditto
	Hamilton Strangles Vaccine	ditto
	Hamilton Vaccine for Contagious Mammitis	ditto
	Metacal	ditto
	Nutrimol	ditto
	Pro-Vet Antiseptic Capsules	ditto
	Pro-Vet Antitoxic Drench	ditto
	Pro-Vet Black Spot Application	ditto
	Pro-Vet Blighty	ditto
	Pro-Vet Bloat Draught	ditto
	Pro-Vet Calcium Drench (Iodised)	ditto
	Pro-Vet Canine Distemper Vaccine	ditto
	Pro-Vet Cantharides Blister	ditto
	Pro-Vet Cleansing Drench	ditto
	Pro-Vet Colic Remedy for Horses	ditto
	Pro-Vet Cough Electuary	ditto
	Pro-Vet Diuretic or Staling Powder	ditto
	Pro-Vet Embrocation	ditto
	Pro-Vet Emulsion for Cracked Heels	ditto
	Pro-Vet Foot Rot Paste	ditto
	Pro-Vet Gall Cure	ditto
	Pro-Vet Harness Chafe Application	ditto
	Provetine	ditto
	Pro-Vet Liquid Blister	ditto
	Pro-Vet Mange Specific for Horses	ditto
	Pro-Vet Pan-a-Cea	ditto
	Pro-Vet Pan-a-Ton	ditto
	Pro-Vet Physic Balls for Horses	ditto
	Pro-Vet Pig Powders	ditto
	Pro-Vet Red Blister	ditto
	Pro-Vet Salve	ditto
	Pro-Vet Scour Remedy	ditto
	Pro-Vet Speedo Tonic for Dogs	ditto
	Pro-Vet Stock Drench (Concentrated) for Pigs	ditto
	Pro-Vet Tonic Powders for Horses	ditto
	Pro-Vet Udderlin	ditto
	Pro-Vet Vaginitis Cure	ditto
	Pro-Vet Worm Mixture for Dogs	ditto
	Pro-Vet Worm Powders for Horses	ditto
	Vermitrol	ditto

VETERINARY MEDICINES, 1935—*continued.*

VETERINARY MEDICINES PURPORTING TO COMPLY WITH SECTION SIX OF THE VETERINARY MEDICINES ACT—*continued*

Queensland Wholesale Dealer.	Sold Under the Name of—	In Cases where the Queensland Wholesale Dealers obtain their supplies from sources outside of this State, the names of the Manufacturers or Suppliers are given.
Hayes Veterinary Co., 351 Queen Street, Brisbane	Aloetic Ball, Wyleys Ltd.	Wyleys Ltd., Coventry, England
	Cutter Blackleg Aggressin (Solid)	The Cutter Laboratory, Berkeley, U.S.A.
	Cutter Blackleg Antigen (Blacklegol)	ditto
	Havcol	Manufactured in Queensland
	Hayes' Barbed Wire Liniment	ditto
	Hayes' Cattle Blight Powders	ditto
	Hayes' Cleansing Drench	ditto
	Hayes' Condition Powders	ditto
	Hayes' Lampas Lotion	ditto
	Hayes' Mammitis Remedy	ditto
	Hayes' Mange Ointment	ditto
	Hayes' Redwater Cure	ditto
	Hayes' Scour Powders	ditto
	Hayes' Udder Ointment	ditto
	Hayes' Veterinary Ointment	ditto
	Hayes' Wart Lotion	ditto
	Hayes' Worm Powders for Horses	ditto
	Lung Worm Injection Remedy	ditto
	Yohimbin	ditto
R. S. Hunter, Pty., Ltd., Mary Street, Brisbane	Rapid All Blue Healing Ointment	Manufactured in Queensland
H. J. Ling, Babinda	Hayden's Special Gripe Drench	Manufactured in Queensland
W. Lovelock and Co., Ltd., Roma Street, Brisbane	Day, Son and Hewitt's— Black Physic Balls	Day, Son and Hewitt, Ltd., London, England
	Broncholine	ditto
	Brown Chemical Extract	ditto
	Colonial Red Rrench	ditto
	Curdolix	ditto
	Diuretic Balls	ditto
	Easakof	ditto
	Eye Wash	ditto
	Gall Ointment	ditto
	Gaseodine	ditto
	Gaseous Fluid	ditto
	Globe Disinfectant	ditto
	Kossolian Blood Salt (General)	ditto
	Kossolian Blood Salt (Racehorse)	ditto
	Non-poisonous Worm Tablets	ditto
	Red Paste and Condition Balls	ditto
	Red Worm Mixture	ditto
	Udder and Sore Teat Salve	ditto
	Universal White Chemical Extract	ditto
	Vetalenta	ditto
	Wart Solvent	ditto
	Worm Balls	ditto
	Worm Powders for Horses, &c.	ditto
	Xemos	ditto
Mactaggart's Primary Producers' Co-op. Assn. Ltd., Eagle Street, Brisbane	Cutter Blackleg Aggressin (Solid)	The Cutter Laboratory, Berkeley, U.S.A.
	Cutter Blackleg Antigen (Blacklegol)	ditto
	Equinoint	Goodalls Ltd., Durham, England
	Kuso	J. P. Cusack, Sydney, N.S.W.
	Mactaggart's Carbon Tetrachloride Fluke and Worm Drench	Manufactured in Queensland
T. W. Moss and Co., 121 Eagle Street, Brisbane	Osmond and Sons Life Saving Red Draught	Osmond and Son (Aust.), Ltd., Sydney, N.S.W.
	Osmond's Antiseptic Pessaries	ditto
	Osmond's Bot Capsules	ditto
	Osmond's Oxygas	ditto
	Osmond's Saltona Blood Salt	ditto
	Osmond's Vaccadyne	ditto
	Osmond's Zenos Fluid Disinfectant	ditto
New Zealand Loan and Mercantile Agency Co., Ltd., Eagle Street, Brisbane	Cooper's Improved Worm Tablets	Wm. Cooper and Nephews (Aust.), Ltd., Sydney
	Lavene Animal Wash	ditto
	Kur Mange	ditto

VETERINARY MEDICINES, 1935—*continued.*

VETERINARY MEDICINES PURPORTING TO COMPLY WITH SECTION SIX OF THE VETERINARY MEDICINES ACT—*continued.*

Queensland Wholesale Dealer.	Sold under the name of—	In cases where the Queensland Wholesale Dealers obtain their supplies from sources outside of this State, the names of the Manufacturers or Suppliers are given.
W. A. Noble and Sinnamon, Ruthven Street, Toowoomba	Elbon Dog Alterative	Manufactured in Queensland
	Noble's Aperient Pills for Large Dogs	ditto
	Noble's Aperient Pills for Small Dogs	ditto
	Noble's Blight Specific for Cattle and Horses	ditto
	Noble's Cleansing and Tonic Dairy Drench	ditto
	Noble's Mange Specific	ditto
	Noble's Poultry Powder	ditto
	Noble's Scour Specific for Calves	ditto
	Noble's Vettoll	ditto
	Noble's Worm and Condition Pills for Large Breeds	ditto
	Noble's Worm and Condition Pills for Small Breeds	ditto
	Noble's Worm Specific for Puppies	ditto
Nobles Pty., Ltd., Eagle Street, Brisbane	Contagious Vaginitis Ointment	Sykes (Aust.), Drench Ltd., Melbourne, Vic.
	Sykes' Animal Colic Remedy	ditto
	Syke's Animol	ditto
	Sykes' Concentrated Animal Chemical Food	ditto
	Syke's Creatol	ditto
	Syke's Drench	ditto
	Syke's Farm and Home Embrocation	ditto
	Syke's Udderine	ditto
Norris Agencies Ltd., 639 Ann Street, Brisbane	C.N. (25 per cent)	West Disinfecting Co., New York, U.S.A.
	Sidolia	Manufactured in Queensland
R. O'Reilly, 26 Cintra Road, Bowen Hills	Blackleg Vaccine (Blacklegoids) Single	Parke, Davis and Co., Sydney, (also Canada and U.S.A.)
	Blackleg Vaccine (Blacklegoids) Double	ditto
	Nema Worm Capsules	ditto
	Nema Worm Drench	ditto
	Parke, Davis and Co.'s Fluke and Worm Drench (Double Strength)	ditto
	Tetanus Antitoxin	ditto
	Worm and Fluke Drench (Special)	ditto
Outridge Chemical Co., Wondai	Burnett Worm Drench Powder for Sheep only	Manufactured in Queensland
The Poultry Farmers' Co-op. Society, Ltd., Roma Street, Brisbane	Healo	Manufactured in Queensland
	Red Comb Bronchitis Cure	ditto
	Red Comb Chick Tonic	ditto
	Red Comb Cleansing and Tonic Drench	ditto
	Red Comb Eye Roup Cure	ditto
	Red Comb Fowl Pox Vaccine	ditto
	Red Comb Roup Cure	ditto
	Red Comb Scaley Leg Ointment	ditto
	Red Comb Veterinary Iodine	ditto
	Red Comb Wart Preventative	ditto
	Red Comb Worm and Condition Powders for Horses	ditto
	Red Comb Worm Capsules	ditto
	Red Comb Worm Killler	ditto
	Vi-tone	ditto
Queensland Chemical Distributing Co., 111 Elizabeth Street, Brisbane	Lee's Nopara Dual Fluke and Worm Remedy	L. W. Lee, Sydney, N.S.W.
	Vetrolene	Manufactured in Queensland
Queensland Pastoral Supplies, Ltd., Bowen Street, Brisbane	Hibiscus Carbon Tetrachloride Fluke Drench	Manufactured in Queensland
Arthur V. Ralston, 34 Oriel Road, Clayfield	Vardonia	Manufactured in Queensland
R. A. Riddell, Rome Street, Yeronga	Aricyl	Fassett and Johnson Ltd., Sydney (Agents for Bayer Products, Ltd., London).
	Istin	ditto
	Odylen	ditto

VETERINARY MEDICINES, 1935—*continued.*

VETERINARY MEDICINES PURPORTING TO COMPLY WITH SECTION SIX OF THE VETERINARY MEDICINES ACT—*continued.*

Queensland Wholesale Dealer.	Sold under the name of—	In cases where the Queensland Wholesale Dealers obtain their supplies from sources outside of this State, the names of the Manufacturers or Suppliers are given.
Robinson and Bott, Pty., Ltd., 459 Adelaide Street, Brisbane	Rawleigh's—	
	Colic and Bloat Ease	The W. T. Rawleigh Co., Ltd., Melbourne, Vic.
	Poultry Powder	ditto
	Roup Powder	ditto
	Stock Tonic	ditto
	Veterinary Application	ditto
Row and Co., East Street, Rockhampton	Row's Alterative Diuretic and Condition Powder for Horses	Manufactured in Queensland
	Row's Barbed Wire Fence Liniment	ditto
	Row's Cattle Eye Lotion	ditto
	Row's Swamp Cancer Remedy	ditto
Salmond and Spraggon (Aust.), Ltd., 310 Eagle Street, Brisbane	Elliman's Royal Embrocation	Elliman Sons and Co., Ltd., Slough, England
Spedosol Supply Co., Colonial Mutual Building, Queen Street, Brisbane	Spedosol Ointment for Hard Udders	Manufactured in Queensland
	Spedosol Powder	ditto
Surgical Supplies Ltd., Queen Street, Brisbane	Alterative Worm and Condition Powders	Manufactured in Queensland
	Bio Blackleg Aggressin	Biological Institute of Aust., Ltd., Sydney, N.S.W.
	Bio Blackleg Anaculture Vaccine	ditto
	Bio Blackleg Pellets	ditto
	Bio Fowl Pox Vaccin	ditto
	Bio Mastitis Toxiculture	ditto
	Bio Pleuro Virus	ditto
	Bio Strangles Toxiculture	ditto
	Blackleg Cords	ditto
	Blackleg Solid Aggressin	ditto
	Dr. Metcalfe Sharpe's Application	Manufactured in Queensland
	Dutton's Mange Specific	ditto
	Dutton's Redwater Cure	ditto
	Equine Cough Syrup	ditto
	Gripe Drench	ditto
	Scour Powders	ditto
	Spavin Paste	ditto
	Special Bull Tonic	ditto
	S.S. Antiseptic Vaginal Kugloids	ditto
	S.S. Black Oil	ditto
	S.S. Blight Powder	ditto
	S.S. Heal All Ointment	ditto
	S.S. Lung Worm Specific	ditto
	S.S. Reliable Embrocation	ditto
	S.S. Scour Cure	ditto
	S.S. Tonic Powder for Cattle	ditto
	S.S. Udder Specific	ditto
	Surgical Supplies Blister	ditto
	Surgical Supplies Dairy Ointment	ditto
	Surgical Supplies Gall Cure	ditto
	Surgical Supplies Ltd., Cleansing Drench	ditto
	Surgical Supplies Ltd., Lampas Cure	ditto
	Surgical Supplies Ltd., Worm Powders for Horses	ditto
	Veterinary Blood and Water Powder	ditto
	Wart and Horn Solvent	ditto
Taylors, Elliots, and Australian Drug Pty., Ltd., 154 Charlotte Street, Brisbane	Austral—	
	Aloetic Physic Ball	Manufactured in Queensland
	Arsenic and Copper Worm Drench	ditto
	Barb Wire Embrocation	ditto
	Blood and Water Drench	ditto
	Calcifer Powder	ditto
	Calcifer Solution	ditto
	Caustic Stick	ditto
	Cleansing Drench	ditto
	Cooling Lotion	ditto
	Dairy Ointment	ditto
	Dusting Powder	ditto
	Eye Blight Tablets	ditto
	Gall Ointment	ditto
	Garget Powder	ditto
	Gripe Drench	ditto

VETERINARY MEDICINES, 1935—*continued.*

VETERINARY MEDICINES PURPORTING TO COMPLY WITH SECTION SIX OF THE VETERINARY MEDICINES ACT—*continued.*

Queensland Wholesale Dealer.	Sold under the name of—	In cases where the Queensland Wholesale Dealers obtain their supplies from sources outside of this State, the names of the Manufacturers or Suppliers are given.
Taylors, Elliotts, and Australian Drug Pty., Ltd., 154 Charlotte Street, Brisbane—*continued.*	Austral—*continued.*	
	Horse Blister	Manufactured in Queensland
	Iodine Capsules	ditto
	Liquid Blister	ditto
	Lung Worm Powders	ditto
	Mange Dressing	ditto
	Pig Cough Powder	ditto
	Pig Purgative Powder	ditto
	Pig Worm Powder	ditto
	Regulating Drench	ditto
	Ringworm Ointment	ditto
	Scour Drench	ditto
	Trypan Blue	ditto
	Vaginal Douche Powders	ditto
	Vaginal Pessaries	ditto
	Veterinary Embrocation	ditto
	Wart Paint	ditto
	Worm and Condition Powders	ditto
	Barko Tasteless Condition Powders	ditto
	Bickmore's Gall Cure	The Bickmore Co., Melb., Vic., (and U.S.A.)
	Doyle's Distemper Mixture	F. G. Doyle, Sydney, N.S.W.
	Doyle's Laryngine	ditto
	Doyle's Skin Dressing	ditto
	Lieut. James' Blistering Ointment	W. H. James, England
	Reducine	F. G. Doyle, Sydney, N.S.W.
	Row's Embrocation	Edward Row and Co., Sydney, N.S.W.
	Skinner's Cleansing and Tonic Drench	Skinner's Ltd., Sydney, N.S.W
	Skinner's Ointment	ditto
	Taylor's Alterative Worm and Condition Powder	Manufactured in Queensland
H. G. Tudor, Russell Street, Toowoomba	Condition Powders for Horses	Manufactured in Queensland
	Stock Cough Paste	ditto
	Vaginitis Powder	ditto
United Chemical Co., Ltd., 158 Grey Street, South Brisbane	United Concentrated Epsom Salts Liquid Drench	Manufactured in Queensland
	United Fluke and Worm drench	ditto
J. C. Ure, 244 Charlotte Street, Brisbane	Victus—	
	Antiseptic Ointment	Fraser Henderson, Pty., Ltd., Melbourne, Vic.
	Concentrated General Antiseptic	ditto
	Stock Drench	ditto
	Poultry Powder	ditto
	Worm and Fluke Drench	ditto
Wilcox, Mofflin, Ltd., Longland Street, Brisbane	Cesto Tape Worm Drench	Wilcox, Mofflin, Ltd., Sydney, N.S.W.
	Red Spot Double Strength Carbon Tetrachloride Drench	ditto
	Tetralene	ditto
	Wilmolene	ditto
L. A. Wilkinson (Northern) Pty., Ltd., 44 Queen Street, Brisbane	L. P. Barb Wire Embrocation	Manufactured in Queensland
	Wilkinson's—	
	Canker Lotion for Dogs	ditto
	Cleansing Drench	ditto
	Condition Powder	ditto
	Distemper Capsules	ditto
	Dog Tonic	ditto
	Dog Worm Capsules	ditto
	Eye Ointment for Dogs	ditto
	Laxative Dog Syrup	ditto
	Mange Lotion for Dogs	ditto
	Poultry Tonic	ditto
	Worm Powder	ditto
	Vetsalve	ditto

F. B. COLEMAN, Officer in Charge.

REPORT OF THE CHIEF INSPECTOR OF STOCK.

The following preliminary numbers have been received from the Registrar-General showing the number of live stock in Queensland on the 1st January, 1935:—

Year.	Horses.	Cattle.	Sheep.
1st January, 1934	450,024	5,781,170	20,072,804
1st January, 1935	448,604	6,052,641	21,574,182

Showing an increase over the previous year of approximately 200,000 cattle and 1,061,000 sheep, and a decrease of 10,000 horses.

The whole of the western portion of the State has experienced severe drought conditions, considered by many to be worse than in 1915 and 1925. The situation has been more intensified owing to successive years of bad seasons, in some parts, for the past nine or ten years.

Severe losses, particularly of sheep, have occurred, although in many cases they have been artificially fed, and thousands were removed from the West for agistment to the coastal areas and the Darling Downs. As would be expected under these conditions the lambing is considerably under the average. The drought conditions have again emphasised the necessity for improving watering conditions on our main stock routes.

The Government, to afford further relief to graziers in drought-stricken areas, decided that from the 1st April last a rebate of 35 per cent. be allowed on stock in respect of both forward and return journey freight, conditional on return of the stock to original properties as soon as the state of the properties permits.

A decrease in the number of horses is again noted, and it is found that the available supply of draught horses is not equal to the demand; consequently the prices are increasing. Although the export trade has fallen off in recent years, it is considered that many graziers with large areas of land could profitably breed horses suitable for export and Australian requirements.

Stallion Boards have again been in operation with the object of eliminating sires that are unsound or of unsuitable type. The Boards report a general improvement in the class of stallions submitted, more especially in the heavy classes.

—	Number Examined.	Life Certificates Issued.	Annual Certificate Issued.	Rejected.
Blood Horses ..	173	74	74	25
Draught Horses ..	319	93	159	67
Ponies	42	30	11	1
Trotters	19	10	7	2

Dairy farmers are realising the danger of maintaining diseased cows in their herds, and the benefits to be derived by the application of the tuberculin test. There is a greater co-operation between them and Departmental inspectors. Owners are now requesting the application of the test, and other advice on animal subjects.

Buffalo Fly.

It is gratifying to note that the buffalo fly which invaded the north-western portion of the State some three years ago, and threatened to extend at an alarming rate to other portions of the State, has during the last two years made no progress whatsoever. A careful survey of previously infested or suspected holdings has shown that the fly is now only located on two properties adjoining the North Australian Territory, which were the original properties where the introduction of the fly occurred.

Climatic conditions appear to have played an important part in preventing the spread of the fly, but it may also be due to the fact that two years ago the C.S.I.R. released some 15,000 specimens of the parasitic wasp *Spalangia* in North Australia, but up to the present time no survey of developments has taken place.

The Veterinary Medicines Act.

This Act has been functioning for its second year, and is becoming of considerable benefit to stockowners purchasing proprietary medicines, &c. It has been the means of checking or totally preventing some unscrupulous vendors from placing certain mixtures on the market; 503 veterinary medicines, &c., were approved for registration, and 101 held for further consideration.

Tick Cleansing Areas.

Cleansing operations have been progressive and satisfactory.

In the South Burnett area approximately 800 square miles is being dealt with. About one-third of this area is free from ticks, and another third is practically clean, only a few properties being at present tick-infested.

The Helidon area has not been extended, but West Haldon, Black Duck Creek, Blackfellows Creek, and Left Hand Branch Creek have been embraced within the scope of operations for further protection to the Darling Downs. The Helidon and Crow's Nest areas have recently been combined, making the approximate area some 1,900 square miles. Of this area 1,400 square miles is free from ticks, comprising about 900 holdings and carrying some 30,000 head of stock. The remaining 500 square miles, which is being regularly supervised, embraces some 986 holdings, with about 21,000 head of stock.

—	Holdings Inspected.	Total Stock Inspected.	Holdings Infested.	Stock Treated.
Helidon–Crow's Nest Area	3,267	136,665	1,091	84,625
South Burnett Area	2,287	120,178	266	59,230

Quarantine Act.

During the year the following hides and skins were imported and treated according to the requirements of the Quarantine Regulations:—

From France	100	ox hides
Italy	475	ox hides
India	22,000	goat skins
New Zealand ..	937	sheep skins
Russia	5,000	hare skins

Live Stock Imported.—Five bulls, 7 heifers, 3 pigs, 7 dogs, 15 monkeys, 1 mongoose, 2 squirrels, 1 python, 2 queen bees, 67 canaries, 2 pigeons, 5,892 finches and other aviary birds, 24 turtles, 1,560 goldfish and other small fish.

Articles Imported after complying with the Quarantine Regulations.—35,570 lb. sheep bungs, 45,900 lb. hog casings, 880 lb. blood albumen, 32 parcels feathers, 14 hams, 26 bales wool, 18 pheasants (frozen), 4 grouse (frozen), 12 cases preserved meats, 1 case lard, 4 used riding saddles, 2 sets harness, 1 bridle, 4 horse effects, 16 bird cages, 4 animal cages, 3 pig crates, 5 sets deer horns, 2 deer heads, 1 case butterflies, 1 native shield, 1 sjambock. Skins: 1 bear, 1 crocodile, 1 echnida, 2 fox, 1 leopard, 1 lion, 1 rabbit, 2 snake, 1 sheep.

Prosecutions.

Act.	Number of Prosecutions.	Number of Convictions.
Diseases in Stock Acts	70	70
Slaughtering Act	33	33
Brands Acts	5	5

Tuberculin Test.

Two thousand and seventy-one animals were submitted to the test, as compared with 832 for the previous year.

A large number of the animals tested this year have been submitted under the Tubercle Free Herd Scheme.

Results of the tests are as follow:—

Total number of animals tested	2,071
Total number of positive reactions ..	104
Total number of doubtful reactions ..	16

Dipping Fluid.

The number of dipping fluids analysed during the year was 342.

Horses Exported Overseas.

Horses exported overseas numbered 2,337.

Viscera Examined During the Year.

One hundred and twenty-five samples of viscera and stomach contents were examined by the Agricultural Chemist. Of these 23 were found to contain arsenic, and 17 gave alkaloidal reaction.

Pleuro Pneumonia and Contagiosa.

The total number of outbreaks reported was 50, as compared with 37 the previous year.

District.	1934.						1935.						Total.
	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April.	May.	June.	
Barcaldine	..	..	..	..	..	..	..	..	..	..	..	..	..
Bowen	2	..	..	..	..	..	2	..	..	1	1	..	6
Brisbane	..	..	..	..	..	..	..	..	7	3	..	..	10
Cairns	..	..	..	..	..	..	2	1	..	1	..	..	4
Charleville	..	..	..	1	..	..	..	..	..	..	..	..	1
Clermont	..	..	..	1	..	..	1	..	..	..	..	..	2
Cloncurry	..	..	..	..	1	..	..	..	..	..	..	..	1
Emerald	..	..	..	..	..	..	..	..	..	..	..	..	..
Gladstone	..	..	..	..	..	..	..	..	..	..	..	..	..
Hughenden	..	1	..	..	..	..	..	..	..	..	..	..	1
Longreach	1	1	..	..	..	1	..	..	..	..	..	..	3
Maryborough	..	..	..	1	..	..	..	..	..	..	..	..	1
Normanton	..	..	..	..	..	..	..	..	..	..	..	..	..
Rockhampton	1	4	1	..	..	..	1	..	1	..	..	..	8
Roma	..	..	..	..	..	..	..	..	..	..	1	..	1
South Burnett	2	..	..	..	..	..	..	..	1	..	..	..	3
Toowoomba	..	..	..	..	..	..	..	..	..	6	..	..	6
Townsville	1	..	..	..	..	..	1	..	..	..	..	..	2
Warwick	..	..	..	..	..	..	..	..	..	..	..	..	..
Winton	1	..	..	..	..	..	..	..	..	..	..	..	1
Totals	8	6	1	3	1	1	7	1	9	11	2	..	50

TABLE SHOWING STOCK MOVEMENTS IN THE SEVERAL STOCK DISTRICTS FOR THE YEAR ENDED 30TH JUNE, 1935.

District.	Entered District.			Removed from District.			Movements in District.			Stock Dipped.		Stock Sprayed.	
	Horses.	Cattle.	Sheep.	Horses.	Cattle.	Sheep.	Horses.	Cattle.	Sheep.	Horses.	Cattle.	Horses.	Cattle.
Barcaldine ..	1,853	2,571	111,737	9,131	23,305	902,414	7,828	7,028	972,977	40	710	..	1,262
Bowen ..	961	8,532	13,076	2,034	13,957	21	4,263	38,649	101	2	430	..	..
Brisbane ..	6,381	156,829	447,052	4,444	61,119	40,054	6,793	327,797	59,775	615	2,959	2,346	315
Cairns ..	1,183	10,056	9,668	1,997	30,688	5	4,585	18,099	1,070	244	37,102	95	136
Charleville ..	7,027	94,213	306,996	15,142	144,836	1,167,106	11,314	60,834	324,833	..	..	..	..
Clermont ..	959	24,984	91,186	2,175	59,442	44,412	3,298	25,787	113,432	40	5,633	..	..
Cloncurry ..	1,854	26,579	113,760	3,018	57,394	180,639	6,806	40,663	586,536	..	29,254	53	12,335
Coolangatta..	347	6,982	875	300	6,441	550	25	2,098	..	236	858	59	..
Emerald ..	2,298	14,311	246,261	5,095	58,980	248,779	8,019	36,810	333,814	535	17,989	3,500	24
Gladstone ..	1,352	32,971	3,727	1,505	7,695	69	615	27,082	40	..	48	1,028	10,740
Helidon ..	1,842	8,071	5,167	2,307	31,269	3,534	1,249	48,810	1,506	1,574	64,633	301	1,573
Hughenden ..	2,741	15,989	139,791	4,964	31,276	585,598	9,553	16,446	1,007,420	103	9,877	703	6
Longreach ..	1,682	19,603	144,342	6,527	15,935	930,467	9,613	15,423	1,220,370	..	..	..	2,792
Maryborough	1,119	12,685	37,203	3,362	91,579	318	4,695	99,380	877	39	9,241	21	1
Normanton ..	757	2,024	41,814	2,267	37,422	2,500	4,072	34,173	14,100	100	5,777	300	..
Rockhampton	1,164	62,106	141,380	2,640	46,404	69,840	10,234	198,545	41,950	170	1,050	18	36
Roma ..	1,850	17,848	162,646	5,843	92,396	257,365	8,905	127,708	732,611	443	27,142	239	2
South Burnett	3,269	37,881	56,166	5,889	160,864	51,151	10,437	229,982	646	1,255	93,969	607	282
Toowoomba	8,520	106,404	499,196	15,985	148,156	465,675	41,836	713,349	1,770,245	603	20,415	461	7,166
Townsville ..	7,041	68,155	97,255	6,975	57,807	41,140	9,304	45,997	146,406	40	..	194	..
Warwick ..	3,539	15,529	210,490	3,702	23,360	221,093	5,470	100,569	427,273	111	4,127	68	1,484
Winton ..	3,870	46,567	152,330	6,786	60,528	459,771	4,418	17,377	505,590	..	..	..	..

STOCK SOLD AT CANNON HILL SALEYARDS FOR THE YEAR ENDED 30TH JUNE, 1935

Bullocks, 89,496 ; cows, 41,182 ; sheep, 561,423 ; lambs, 59,458 ; calves, 33,977 ; swine, 35,314.

Total stock sold year ended 30th June, 1935	820,850
Total stock sold year ended 30th June, 1934	710,588
Increase in sale all stock year ended 30th June, 1935	110,262

Cattle—
Average value per cental bullocks and steers, 20s. 11d. = per head £6 0s. 5d.
Average value per cental cows and heifers, 18s. 1d. = per head £3 16s. 1d.

Sheep—
Average value per lb., wethers 3·06d.
Average value per lb., ewes 2·69d.

Lambs—
Average value per lb., 5·65d.

Swine—
Average value per lb., porkers and baconers 5·26d.

Calves—
Average value per lb., 2·45d.

"THE SLAUGHTERING ACT OF 1898."

Reports from Departmental officers indicate that the provisions of the Act and regulations are being observed fairly well by the butchers in the various parts of the State. In some cases orders have been issued where cleansing and repairs have been necessary, but the general observance has been satisfactory.

Many improvements have been effected in butcher shops in various country centres during the past twelve months, and quite a number of new refrigerating plants have been installed.

Slaughter-house piggeries have been maintained in accordance with the requirements of the regulations. In many cases drainage has been improved and better shelters and feeding places provided. In some districts there is still room for improvements in these respects.

Delivery carts have had the supervision necessary to keep them up to the required standard of cleanliness and good repair.

Thirty new butcher shops have been erected in different towns and country centres, some of them being of the most modern type.

Twenty-five new slaughter-houses have also been erected.

The total number of butcher shops in the State is now 825, and there are 624 slaughter-houses. These figures are exclusive of the metropolitan area.

BRISBANE ABATTOIR AREA.

During the year regular inspections have been made of all butcher shops, delivery carts and cash carts, the number of such inspections totalling 10,405. The standard, which was considerably raised after the Act came into force, has been well maintained and in many cases improved.

The general standard of cash carts has gradually improved during the year, and some of these vehicles are very good and the general improvement in all is most satisfactory.

Illegal Slaughter.—The matter of illegal slaughter in the metropolitan area which required so much attention following on the opening of the abattoir has been kept well in hand, but continual vigilance is necessary to keep this practice in check.

Several cases of alleged illegal slaughter have been reported, but on investigation have not been substantiated.

Metropolitan Shops.—The number of shops and vehicles registered by the Queensland Meat Industry Board to the 30th June, 1935, as compared to the previous year, is as follows:—

—	1933-34.	1934-35.
Shops	291	322
Vehicles, motor, and others ..	402	389
Cutting carts	95	112

Bacon Factories.

There has been a marked increase in the number of pigs killed at bacon factories.

Number Slaughtered.	1933-34.	1934-35.
Pigs	250,688	324,107

Condemnations from the above are as follow:—

Tuberculosis.	1933-34.	1934-35.
Carcasses	2,720	3,354
Heads	14,702	24,869

In addition, the following cattle were slaughtered at the several bacon factories:—

Bullocks	2,438
Cows	11,615
Calves	4,132

Stock Slaughtered and Condemned at the Brisbane Abattoir.

The following statement shows stock slaughtered and condemned at the Brisbane Abattoir for home markets, stock killed for export purposes not being included. It will be noticed that there has been a considerable decrease in the number of sheep and lambs killed.

Description of Stock.	1933-34.	1934-35.
Bullocks	47,406	53,617
Cows	46,313	39,220
Calves	48,012	52,187
Sheep and lambs	441,792	406,499
Swine	35,364	30,305

Condemnations for the period under review were as follow:—

Cause.	Bullocks.	Cows.	Calves.	Sheep.	Swine.
Tuberculosis	845	1,435	28	..	785
Emaciation	143	1,074	1,797	1,031	1
Gangrene	76	90	13	..	17
Fever	7	26	7	310	7
Bruising	78	126	14	..	..
Abscess	22	43	121	387	15
Redwater	27	16	..	16	..
Actinomycosis	3	6	..	..	..
Pneumonia	..	..	2	..	..
Pyæmia	..	1	..	..	1
Advanced Pregnancy	..	4	..	..	..
Osteomyelitis	..	..	4	..	..
Weed poisoning	19	12	..	..	..
Peritonitis	2	2	..	..	1
Jaundice	2	..	..	9	..
Navel Ill	..	..	25	..	..
Melanosis	..	..	..	..	2
Cancer	..	1	..	..	..

The following table shows stock slaughtered and condemned in the course of the period under review, and is compiled from returns furnished by permanent officers of the Department performing slaughtering duties at the following centres:—Ayr, Barcaldine, Boonah, Bundaberg, Beaudesert, Bowen, Brandon, Clermont, Coolangatta, Crow's Nest, Cloncurry, Charters Towers, Cairns, Charleville, Dalby, Gympie, Gladstone, Gayndah, Goondiwindi, Helidon, Hughenden, Home Hill, Innisfail, Ingham, Ipswich, Julia Creek, Kingaroy, Longreach, Maryborough,

Miles, Mackay, Mareeba, Normanton, Pittsworth, Rockhampton, Roma, Toowoomba, Townsville, Warwick, Wondai, Wandoan, and Winton.

The return of swine slaughtered is exclusive of those treated at bacon factories, a list of which is shown separately.

Description of Stock.	Number Slaughtered.	Carcasses and Portions Condemned.	Disease.	Per-centage.
Bullocks	44,573	53 carcasses	Tuberculosis	·11
		15 forequarters	Tuberculosis	·03
		3 hindquarters	Tuberculosis	·006
		21 heads	Tuberculosis	·04
		2 carcasses	Bruised	·004
		14 forequarters	Bruised	·03
		7 carcasses	Emaciation	·01
		2 carcasses	Redwater	·004
		46 heads	Actinomycosis	·103
		1 carcass	Lantana poisoning	·002
		1 carcass	Gangrene	·002
Cows	67,451	205 carcasses	Tuberculosis	·303
		50 forequarters	Tuberculosis	·07
		13 hindquarters	Tuberculosis	·01
		21 heads	Tuberculosis	·03
		3 carcasses	Bruised	·004
		8 forequarters	Bruised	·01
		11 carcasses	Emaciation	·01
		1 carcass	Redwater	·001
		8 heads	Actinomycosis	·01
		1 carcass	Advanced pregnancy	·001
		7 carcasses	Pneumonia	·01
		1 carcass	Gangrene	·001
Calves	10,652	67 carcasses	Underweight	·62
		1 carcass	Emaciation	·009
		1 carcass	Lantana poisoning	·009
Sheep	283,607	151 carcasses	Emaciation	·05
		3 carcasses	Bruised	·001
		2 carcasses	Caseous lymph adenitis	·0003
Swine	36,535	132 carcasses	Tuberculosis	·36
		1,213 heads	Tuberculosis	3·32
		1 head	Abscess	·002
		3 carcasses	Emaciation	·006
		3 carcasses	Peritonitis	·006
		4 carcasses	Pneumonia	·008
		2 carcasses	Gangrene	·004

The return of stock slaughtered under the supervision of Police Acting Inspectors is as follows:—

Bullocks	40,449
Cows	48,327
Calves	2,834
Sheep	101,456
Swine	17,172

ARTHUR H. CORY,
Chief Inspector of Stock.

APPENDIX A.

REPORT OF SENIOR INSTRUCTOR IN SHEEP AND WOOL.

Mr. J. Carew, Senior Instructor in Sheep and Wool, reports:—

Weather conditions in the southern sheep areas commenced favourably and continued so until midsummer, when it became very hot and continued so for two months.

After the heat wave dry conditions continued throughout the whole of the sheep country. This dry spell following the inadequate falls experienced in the Central West, together with the prolonged heat wave during midsummer, resulted in extensive parched and bare areas. The water supplies also suffered severely, which was due chiefly to a series of years of reduced rainfalls which served to further intensify the seriousness of the position. These bare pastures and trying conditions were responsible for heavy losses amongst the old and breeding ewes. As a precaution against losses large numbers of ewes were not joined with rams. Both of these influences will have a serious effect on the natural increase of the State, which I consider will be down to 30 per cent. marked lambs. A considerable number of sheep from the North and Central West were moved, principally east and south, where the rainfall was more generous throughout the summer months. This relief was responsible for saving large numbers of sheep.

Wonderful rains recently experienced in the driest western areas have given fresh hope to the sheep owners in these parts. The falls ranged from 3 to 9 inches, which was sufficient to give the soil a good soaking and fill dams and watercourses and result in opening up the stock routes in the Central and North-West, which were closed for want of water. Sheep that were recently shorn suffered severely from the effects of the rain, and many perished as a result.

Although heavy losses occurred a most serious situation has been averted by the unusual rains experienced. Sheep that were listed for sale before the rain at from 3s. to 5s. off shears were either withdrawn from sale or had reserves of from 9s. to 12s. per head placed on them. This was due to the changed outlook for an early spring, a general restoration of confidence in the future of the industry, and the better prices ruling at the last sales of the year for wool.

Sales of old sheep during most of the year were slow and difficult, owing to the number of young sheep offered for sale at low prices in the drought-stricken area. Fat sheep sold at payable prices throughout the year, notwithstanding the low price of wool, which reduced the skin value considerably. At the present time all classes of fats are on high price levels, but only restricted offerings are available.

Fat Lambs.—Although the number of cross-bred lambs showed a substantial increase on the previous year, there is ample scope for a vast increase. The present export of lambs gives no indication of what the State is capable of producing.

The Fat Lamb Scheme, inaugurated by the Department of Agriculture and Stock about eighteen months ago, is developing along well-planned lines. Small flock owners have already realised its advantages. Fat lamb raising, by approved breeding and feeding methods, shows definite promise of developing into a profitable export industry.

Wool.—During the 1934-35 season, 564,352 bales were catalogued and 552,461 bales sold. This amount is not representative of the year's production, as there were about 104,000 bales carried over from the previous season. The following are the prices realised for the different sales held during the year, not including scoured:—

Sale.	Greasy per bale.	Per lb.
	£ s. d.	Pence.
1	14 0 4	10·22
2	13 12 0	10·12
3	13 5 10	9·92
4	13 10 9	10·35
5	13 6 1	10·03
6	12 17 2	9·96
7	11 18 7	8·98
8	11 4 0	8·47
9	13 19 6	10·58
10	15 0 11	11·19
11	15 10 11	11·64
12	15 17 5	12·13
13	15 3 6	11·68
Season's Average	13 15 3	10·38

Although the price realised in the last sale in June showed a decline on the previous, it could be accounted for by the fact that the catalogue comprised a greater percentage of low-quality wools, as is common in a clearing-up sale. At the present time the general tone of the wool market is that it will stay firm or show an advance in keeping with the general scarcity that exists. There is very little carry-over wool now in the stores.

During the period under review officers of this branch have visited many sheep properties, where lecturettes and practical demonstrations in sheep and wool matters have been given.

Arrangements were chiefly made in co-operation with the Selectors', Graziers', and Local Producers' Associations. Developing from these and public meetings in halls, &c., many holdings were visited, chiefly for instruction in culling and classing the ewe flocks, following which the type of ram suitable to the flock was recommended. Much importance is attached to this line of instruction, and with a series of favourable seasons, considerable benefit in extra wool production should result. In addition to these methods of instruction, articles are prepared for publication in the Agricultural Journal and newspapers, wireless talks, interviews, and correspondence.

The stomach worm is still the chief internal parasite giving trouble in the higher rainfall sheep country, and lung and nodule worms are becoming more prevalent. Sheep lice are

causing much apprehension in the clean western country, and owners having sheep on agistment in lice-infested areas should take every precaution against introducing this pest to their clean holdings when returning them to their permanent pastures.

Blowflies were troublesome in some districts during spring, where rains were frequent. From midsummer to the end of June they were particularly quiet over the whole of the State, which coincided with the commencement of the heat wave, which was followed by dry conditions.

Farmers' Wool Scheme.—This scheme provides for the receival of wool from holdings of less than 1,500 merino sheep or from crossbred and British breeds and bags and butts from any holding. The quantity of wool received, namely, 70,065 lb., was represented by 83 growers. A change in policy was decided on before the sales commenced last year, when the wool brokers were asked to take a ballot to see which firm would be our selling agents for the year. The idea was to give each agent a turn in the sale of the wool in order to secure more general support for the scheme. The average price secured for the season's sales for greasy wool was 8·91d. per lb., which can be taken as most satisfactory, considering the class of wool handled.

APPENDIX B.

REPORT OF THE DEPUTY REGISTRAR OF BRANDS.

DETAILS OF REGISTRATIONS, TRANSFERS, ETC., YEAR 1934-1935.

—	Number.	Fees Received.			Number since Inception of Legislation.
		£	s.	d.	
Three-piece brands registered	717	717	0	0	85,503
Cancelled brands reallotted	28	84	0	0	6,948
Symbol brands registered	10	75	0	0	1,559
Cattle earmarks registered	336	336	0	0	27,175
Brands transferred ..	1,718	859	0	0	49,212
Sheep brands and earmarks registered ..	204	113	15	0	11,722
Sheep brands and earmarks transferred ..	194	48	10	0	5,502
Distinctive brands registered	30	No fee.			..
Alteration of address of brands	350	..			..
Brands cancelled ..	18	..			..
Earmarks cancelled ..	124	..			..
Total	..	2,232	15	0	

An increase in the registrations and transfers is again shown for the year, although not as great as that for 1933-34, but in view of the drought conditions prevailing throughout the greater part of the State, the figures are very satisfactory. Following the beneficial rains which fell at the end of June, there should be a further increase in registrations, &c., in the forthcoming twelve months.

Work in connection with the cancellation of disused brands under Section 18 of the Brands Acts is proceeding, and during the past six months about 7,500 notices have been sent out calling upon owners to show cause why their brands should not be cancelled. The response to these notices has caused a marked increase in correspondence, applications having been made to have brands transferred from the estates of deceased owners, or from others who have no further use for their brands. Notices will continue to be sent out each month, and it is anticipated that a very large number of brands will be cancelled, and eventually become available for re-issue.

During the year there were five prosecutions for breaches of the Acts, the defendants being convicted in each case. Warnings were issued to a number of other offences in connection with minor infringements of the Acts and Regulations.

H. S. ILIFF,
Deputy Registrar of Brands.

REPORT OF THE DIRECTOR, ANIMAL HEALTH STATION.

During the year ending June, 1935, steady progress was made in every activity at this station so far as the routine work is concerned. Details follow. For purposes of comparison, the years beginning 1st August, 1932, up to 30th June, 1935, are shown below:—

	22-6-34 to 30-6-35.	1-8-32 to 30-6-35.
Mammitis Vaccine ..	27,154 ..	63,162 doses
Blood for Inoculation ..	6,253 ..	16,851 doses
Attenuated Blood ..	356 ..	356 doses
Pleuro Virus	65,779 ..	182,547 doses
Setons	27,423 ..	90,594
Blackleg Vaccine ..	1,750 ..	4,551 doses
Bleeders	33 ..	64
Animals stalled and inoculated	78 ..	342
Lactic Cultures	267 ..	608
Inward Correspondence ..	3,338 ..	9,969
Outward Correspondence..	5,261 ..	14,444
Sections cut and reported on	82 ..	82
Specimens Examined ..	3,767 ..	8,116

The mammitis vaccine continued to give satisfactory results to owners of dairy cows in all parts of the State. In two cases some trouble was experienced, but this could be attributed to the owners of the cows in question, which were badly infected, expecting immediate results, when we know, from our experience, that in cases of gross infection—provided there are no other complications, such as tubercular disease or actinobacillosis of the udder—a considerable time elapses before a satisfactory result can be observed. An autogenous vaccine is used wherever possible in acute cases, but prophylactic treatment is by far the better, and is advised and frequently taken advantage of by owners of dairy herds, thereby preventing the trouble from spreading throughout the herd. Further research is necessary to ascertain the probable cause of mastitis.

Blood for inoculation was sent out to various parts of the State, and totalled 6,253. This blood was used under field conditions, chiefly on clean cattle, or cattle that had never had tick fever. The losses have not been reported, and it may, therefore, be taken for granted that the percentage, if any, was inconsiderable. Experiments with attenuated blood have established the fact that its use in conjunction with virulent blood of tick fever is the only safe method of inoculating clean animals so that they may survive the reaction without the loss of condition or other undesirable developments which occur when virulent blood alone is used to provide a relative immunity against tick fever.

Previously it was considered a risky proposition to inoculate aged bulls and cows in milk and in calf, and insurance companies would not quote for these risks, but to-day it is possible, with the use of attenuated blood, particularly under stall conditions, to inoculate all these animals with a minimum of risk. They do not lose condition, nor do they suffer from digestive troubles; they go through the reaction without any marked disability, which was so evident in the past, when fat bulls were inoculated with virulent blood of tick fever without the aid of attenuated blood. We have found that, provided they are inoculated with attenuated blood in doses of 14 c.c. three days prior to the inoculation of 3 c.c. of virulent blood, it is possible, after a brief interval of days, to reinoculate them with large doses of virulent blood without any pronounced untoward effects occurring in the general health of the animals concerned. Hitherto these animals have been inoculated under stall conditions, which means that they have never been subjected to any great onslaught of ticks during the progress of the disease, but later in the year, when ticks are very prevalent, it is our intention to inoculate clean experimental animals with attenuated blood and turn them out among the ticks with a certain number of uninoculated controls, so as to prove beyond doubt the efficacy or otherwise of attenuated blood as a protection against severe attacks of tick fever in the presence of ticks. In several instances this last year we have inoculated dairy herds which were being depleted by losses of tick fever with attenuated blood, and in every instance the losses have ceased. If, on the other hand, these cows, which were in profit, had been inoculated with virulent blood, as was the practice heretofore, probably a percentage of the best cows would have died of tick fever.

Pleuro Pneumonia Contagiosa.—We have purchased virus to the extent of 80,681 doses from various sources. This virus is repurchased by stock owners for the purpose of inoculating their cattle. The demand for this virus comes from all parts of the State, but chiefly from the Central and Northern Divisions, whereby far the largest amounts are used.

This natural virus is the only product which is in demand. The immunity established as the result of inoculating last from four to six months. This year the Director of the C.S.I.R. Station, at Oonoomba, prepared a cultivated virus vaccine, and after extended trials in the Northern Territory and elsewhere, came to the conclusion that the immunity from this laboratory product is capable of producing an immunity for seven months, but, although this has been stressed, purchasers always ask for the natural product, consequently we have been unable to dispose of a small supply of Townsville virus vaccine which we have on hand at present. Ultimately I think we should stock nothing but the Townsville virus vaccine, and abandon the collection of natural virus, as it is not possible to standardise it or give any guarantee in connection with it.

Setons.—The use of setons is being discouraged as far as possible, and the use of the hypodermic syringe advocated. The practice of seton inoculation is conducive to septic tails, and does at times bring about a certain percentage of losses which could be avoided if the use of setons were discontinued.

Blackleg or Black Quarter.—Outbreaks of this disease were not so numerous during the year, as in the previous year, owing to the owners vaccinating their cattle with various preparations of black quarter vaccine which are for sale. Recently an outbreak occurred on a station in the Central Division of the State among a flock of valuable merino rams, and several deaths occurred before the trouble was finally settled by vaccinating the flock.

Bleeders.—These are the animals which are used as donors or reservoirs of virulent blood. These are purchased as clean cattle on the Darling Downs, and after they have passed a satisfac-

tory test to establish their freedom from communicable disease, are inoculated with virulent blood and held for about an average of ninety days in tick-free stalls and sold as required to all parts of Queensland. This system is not satisfactory from the standpoint of trying to cut out *A. marginale,* but in any case it would not be possible for many years to come to eliminate this altogether, as *A. marginale* is widely distributed all over the tick-infested lands where cattle ticks are known to exist in Australia. The best that we could do for the present is to send out blood containing *A. centrale,* which is supposed to counteract the bad effects produced by *A. marginale* and immunise against it. If, on the other hand, bleeders are sent out they will undoubtedly become contaminated as soon as they arrive at their destination, but they will carry *A. centrale* in addition to *A. marginale,* which undoubtedly will be a decided advantage.

Lactic Cultures.—These are prepared at this station as required for use of the butter factories in the State.

Dr. Roberts's work on *Ascaris lumbricoides* is of some importance, as it is the first serious attempt to trace its life history in this State and discuss its economic importance in the pig-breeding industry. Although the life history of this parasite has been worked out elsewhere, there is a certain phase of the work which did not necessarily apply to this State.

A certain amount of work has also been carried out on the life cycle of *Ascaris galli,* the roundworm of the fowl. Similarly, there appears to be a difference in several aspects from that recorded by other workers in other parts of the world. The drenching of lambs for parasitic control under field conditions has resulted in showing that there is a possibility of satisfactory control of the stomach worm, *Haemonchus contortus* with carbon tetrachloride or copper sulphate, with a preference for the latter.

In order to ascertain the existence or otherwise of gastro-intestinal parasites in various parts of the State, complete sets of the alimentary tract of sheep were forwarded to this station, and a very useful but incomplete survey was made during the year.

Chicken Raising Experiments.—Some experiments have been conducted during the last two years dealing with the nutritional requirements of chickens, but definite conclusions were not reached until February, 1935, when a series of tests, including white leghorns, australorps, and light Sussex was completed. These tests have now definitely established the fact that the feeding of chicks of a ration with a light protein content (18 to 19 per cent.) should cease at six weeks old for white leghorns and a slightly longer period for heavier breeds, and that a ration with a crude protein content of 14 to 15 per cent. is satisfactory for carrying the chicks on from this stage until the birds are mature.

Egg Production Experiment.—(*a*) This experiment was conducted as a continuation of the chicken-raising experiment to determine the effect upon future egg production of different methods of feeding chicks during the rearing period. The results obtained in this test substantiate the findings of the chicken-raising high protein feeding during the rearing period experiment, as the production is the objective, must cease before the chicks are nine weeks old.

(*b*) The objective of this test was to determine the relative value of rations with different protein levels for feeding laying hens. This test was conducted over a period of two years and finished in April, 1935. Results obtained indicate that provided the ration is well balanced variation of the crude protein level between 14 per cent. and 18 per cent. does not appear to effect egg production; i.e., a ration with a crude protein level of 14 per cent. proves as satisfactory for feeding laying hens as a ration with a higher protein content (16 or 18 per cent.).

Cockerel Raising Experiment.—The object of these experiments was to determine the protein level which would be the most satisfactory in rations for raising cockerels, and also to determine the relative efficiency of meat and milk foods as protein supplements. Two breeds of fowls were used in this work, viz., australorps and light Sussex. Results obtained from the pen-rearing tests show that owing to its comparative cheapness mebo meal is more satisfactory than dried buttermilk for providing the protein requirements of growing cockerels. The protein level which proved to be most satisfactory was 17 per cent., with 15 per cent. only slightly inferior. In the battery tests the ration with 15 per cent. protein content proved to be the best.

Pig Feeding Experiments.—These experiments were planned to determine whether pigs can be economically raised to pork and bacon weights suitable for the export market with the complete exclusion of milk foods from the ration. Meat meal was used as a protein supplement, as this is a protein food which is reasonably cheap and large quantities of which are available locally at the Brisbane Abattoir. The ration used was as follows:—Maizemeal, 45 per cent., pollard 40 per cent., meat meal 8 per cent., lucerne chaff 7 per cent.

A mineral supplement consisting of 75 per cent. calphos and 25 per cent. salt was added to the ration at the rate of 2 lb. per 100 lb. of the above mixture.

The results obtained were highly satisfactory, as these experiments have shown that pigs can be economically produced using the abovementioned ration. The type of carcass produced when pigs were given this ration is superior to that produced when milk is the chief foodstuff.

The reports of Veterinary Surgeons K. S. McIntosh, H.D.A., B.V.Sc., C. R. Mulhearn, B.V.Sc., Dr. F. H. S. Roberts, D.Sc., and Mr. J. E. Ladewig, Q.D.A., B.Sc.Agr., are attached hereto.

J. A. RUDD, L.V.Sc. (Melb.), Director

Mr. C. R. Mulhearn, B.V.Sc., reports:—

An investigation on Piroplasmosis is being carried out at this station, and a preliminary report is being submitted for inclusion in the Annual Report.

The Value of "Attenuated" Blood in Premunition.

This investigation is being carried out to gain information on the value of the intravenous inoculation of a preparatory dose of "attenuated" blood used in conjunction with virulent blood for premunizing purposes. The "attenuated" blood used in the following experiments was taken from animal No. 39, a known carrier of *Babesia bigeminum* and *Anaplasma marginale*, and held in the freezing chamber of the Frigidaire at temperature of approximately minus 5 degrees Centigrade for periods varying from fourteen to thirty-four days prior to use. This blood was taken from the freezing chamber and heated to 36 degrees Centigrade immediately before inoculation. The virulent blood was taken into citrate solution when required, and was used within fifteen minutes or less of being withdrawn. All inoculations of both "attenuated" and virulent blood were given intrajugularly.

In the first experiment two steers, Nos. 74 and 75, were used. No. 74 was given a preparatory dose of 60 c.c. of "attenuated" blood, and three days later both animals were given 20 c.c. of virulent blood. Seven days after the inoculation with virulent blood *Babesia bigeminum* was found in the peripheral blood of each animal. Both animals passed through a mild reaction, but No. 74, which had received the "attenuated" blood, showed no abnormal temperature or other clinical symptoms, whereas No. 75 recorded an abnormal temperature over a period of eight days, reaching a maximum of 105·6. This animal also showed anorexia, but no other clinical symptoms of tick fever. Each animal reacted to *Anaplasma marginale* between thirty and forty days after inoculation, but there was no rise of temperature or other clinical symptoms to indicate that the animals were going through this reaction.

In a second experiment two animals, Nos. 76 and 77, were treated in a similar manner to Nos. 74 and 75—i.e., one animal (No. 76) received 60 cc of "attenuated" blood three days prior to the inoculation of 20 cc of virulent blood, which was given to each animal. Both animals commenced a reaction to *Babesia bigeminum* after an incubation period of only 5 days and both also reacted to *Anaplasma marginale* between 20 and 30 days after the inoculation with the virulent blood. In both animals the reactions against each organism were mild and approximately of equal severity, there being no clinical symptoms with the exception of a rise in temperature. The reactions due to *Anaplasma marginale* were slightly more severe than those due to *Babesia bigeminum*.

A third experiment using animals was 78 and 80 is being carried out on similar lines to those above, and here again the reactions to *Babesia bigeminum* have been mild, there being no obvious clinical symptoms of tick fever with the exception of a rise in temperature. However, No. 80, the animal which received virulent blood only, had a higher temperature, a more prolonged reaction, and a higher concentration of organisms in the peripheral blood than No. 78, the recipient of both "attenuated" and virulent blood.

In the foregoing experiments the reactions in all cases both to *Babesia bigeminum* and *Anaplasma marginale* have been mild and the differences that have occurred may be due to the variation in susceptibility of the individual animals rather than to any advantage due to the preparatory dose of "attenuated" blood. Obviously no general conclusions can be formed from the results of these experiments in which only a small number of animals have been used, and it will be necessary to continue the experiments, using larger numbers of animals before any reliable information on the value of a preparatory dose of "attenuated" blood in the premunition against tick fever can be ascertained.

In the foregoing experiments some useful information has been obtained. The reactions to *Babesia bigeminum* have been very constant, the period of incubation in the six animals treated varying only from 5 to 7 days. This followed the intrajugular inoculation of 20 cc of virulent blood. This result is in marked contrast to results obtained at this Station by other officers using small doses (3 cc) of virulent blood subcutaneously. The period of incubation following these subcutaneous inoculations has varied considerably, and the resultant reactions have in some cases been uncertain and unreliable. Some animals required considerably larger subcutaneous doses of virulent blood before any reaction was recorded. This is of considerable importance from the point of view of premunition as practised in the field. The dose of virulent blood recommended for field premunitions is 3 cc, but as this dose may fail to produce a reaction under favourable laboratory conditions it is probable that under the less favourable field conditions when the blood is often several days old before being used, the required reaction and premunition is sometimes not produced. The writer has had experience of a negative reaction to *Babesia bigeminum* following the intravenous inoculation of 5 cc of 5-day old blood, taken when the organisms were numerous. In view of the foregoing it is most desirable that early research work should be carried out to ascertain the most reliable dose of blood for subcutaneous inoculation under the same conditions as prevail in the field.

Examination of Blood Smears.

Ruge's method for the treatment and examination of thick blood films as practised to demonstrate malarial parasites in human hæmatology has been adopted with slight modifications for use in demonstrating *Babesia bigeminum*. This method is essentially used for thick blood films and by its means the Hæmoglobin is dissolved from the red blood cells without affecting the parasites, which may then be stained so that they will show up through the cell mass.

This method is particularly useful for demonstrating *Babesia bigeminum* when they are scanty in the peripheral blood and if used on suitable cases, it will save considerable time in searching for the parasites, and it will definitely demonstrate whether or not the organisms are present in an uncertain reaction. It should also be successfully applied to the diagnosis of Babesiellosis (*Babesia argentinum*), the organisms of which are very scanty and difficult to demonstrate in the peripheral blood by the ordinary methods.

This thick film method may also make possible the detection of carriers of *Babesia bigeminum* after they have passed through their reaction.

Veterinary Officer Mr. K. S. McIntosh, B.V.Sc., reports:—

During the year approximately 300 specimens for diagnosis have been dealt with. These consisted of specimens from:—Horses, 5 per cent.; Cattle, 30 per cent.; Sheep, 4 per cent.; Pigs, 12 per cent.; Poultry, 34 per cent.; Miscellaneous, 15 per cent.

The following were the most common diseases encountered:—Coccidiosis, tick fever (cattle), new growths, internal parasites, suspected poisoning, dietetic diseases.

In addition to those mentioned above the following specific diseases were noted:—Fowl pox, trichomonas infection, spirochætosis of fowls, blackhead of turkeys, bacillary white diarrhœa in chicks, infectious catarrh of fowls, aspergillosis of fowls, pneumonia of calves, blackleg, tuberculosis, contagious abortion, mammitis, malignant œdema, pneumonia of pigs, spirochætosis of pigs, suppurative otitis of pigs, necrotic enteritis of pigs, paratyphoid of pigs, pneumonia of sheep, footrot of sheep, pregnancy toxæmia, external parasites.

The following cases are worthy of special mention:—

Spirochætosis of Pigs.

Early in 1935 Mr. A. L. Clay, B.V.Sc., District Veterinary Officer at Cairns, forwarded specimens which proved to be lesions of spirochætosis. Later Mr. J. C. J. Maunder, B.V.Sc., Veterinary Officer, Brisbane, reported that he suspected the disease at Gayndah. Some of these pigs were received at the Station and the spirochætes were found on microscopic examination. Another case was received from Boonah.

This disease is not uncommon in other States, but this appears to be the first time it has been diagnosed in Queensland. When the identity of the condition had been definitely established an article was published in the Journal for the information of pig farmers. The mode of transmission of the disease, its control and treatment have not yet been thoroughly worked out, but it would appear that good sanitation is the most important factor in the control of the disease.

Sickness and Mortality in Horses in Roma District.

During April, 1934, Mr. Fitzgerald, Dulacca, reported sickness and mortality in horses. One of us (Mr. K. S. McIntosh) proceeded to Dulacca to investigate. Several horses which had almost recovered showed weakness and one badly affected horse showed low fever, rapid wiry pulse, abnormal thirst, unilateral white nasal discharge, persistent diarrhœa. The owner suspected arsenical poisoning caused by sprayed weeds. This was disproved by an analysis of dead weeds (submitted by the investigator) and viscera (submitted by the owner). Several weed specimens submitted to the Botanist proved inocuous.

Later in the same month, accompanied by the Assistant Botanist, similar investigations were made at Roma. No poisons or poison plants could be detected, but a field diagnosis of arsenical poisoning was made. The symptoms in this case were loss of appetite, great thirst, dry coat, fever, hurried respiration, tucked up appearance, exhaustion, weakness (particularly in hind quarters).

Two different lots of horses were affected, one lot were drinking creek water and the others bore water.

No poison plants were found in the paddock.

In June, 1935, similar trouble was reported at Wallumbilla, Yeulba, Waukon Station.

The trouble was identical with that noted at Dulacca and Roma. Stable fed, paddock fed, young, old, poor and well conditioned horses were affected. Apparently the only successful treatment consisted of turning the horses out and restricting the quantity of drinking water consumed. Blood smears were examined and cultures made from fæces. The fœces were fed to guinea pigs and rabbits and the cultures and serum fed and injected into rabbits and guinea pigs with apparently no ill effects.

The mortality rate is not as high as one would expect when the severity of the symptoms is considered.

Thus chemical, botanical and microbial investigations have all failed to demonstrate the cause of the disease. In all cases the feed was very dry, but if this is a contributing factor, why did not the disease appear previously?

It is of interest to note that one of us (C.R.M.) when Veterinary Officer for the Northern Territory reported the occurrence of two apparently similar "outbreaks."

Contagious Pneumonia of Sheep.

A serious mortality occurred in flocks of sheep in the Miles district. Approximately 400 sheep died in a mob of 3,000. The sheep were in poor condition, having been moved from a drought-stricken country, but they were being depastured on good dry feed when the mortality occurred. Pathological specimens were submitted to this Station and an organism morphologically and culturally similar to the Friedlander bacillus was isolated from lung tissue showing evidence of pneumonia. Twenty-four-hour broth cultures of this organism produced mild clinical symptoms of pneumonia when inoculated intrathoracically into a guinea pig, rabbit, and sheep. The guinea pig died following inoculation and a post-mortem examination revealed a pleuro pneumonia. The organism was recovered from the lungs and the pleural exudate.

Infectious Catarrh of Poultry.

Two outbreaks of a disease in poultry showing similar symptoms and post-mortem findings to

those of infectious Catarrh in New South Wales were investigated. In both cases the mortality rate was low, not exceeding 5 per cent., but the disease proved highly infectious, spreading through the majority of the incontact birds in a very short time. The fact that both these outbreaks followed the introduction of outside birds into the flocks suggests that this disease is more widespread than the report of only two outbreaks would suggest.

Fifty-seven visits were made to properties for the purpose of investigating disease problems and treating sick or injured animals. These included visits to the following Government Institutions:—Dunwich Benevolent Asylum, Police Barracks, Palen Creek Prison Farm, St. Lucia Training Farm. Total mileage covered on these trips was approximately 7,000 miles.

A large volume of correspondence from stockowners has been dealt with and appropriate advice given.

One radio lecture was delivered dealing with Mammitis in dairy cattle.

The following articles have been published in the "Agricultural Journal" and most have already been reprinted as Advisory Leaflets:—Milk fever, Balanitis in sheep, mammitis, lameness in pigs, sterility of dairy cows, lantana and peach poisoning, ulcerative spirochætosis in pigs.

A special investigation on Piroplasmosis is being carried out by one of us (C.R.M.), and a separate report for inclusion in the Annual Report is being submitted.

Dr. F. H. S. Roberts, Entomologist, reports:—

PARASITOLOGY.

The Control of the Sheep Strongyle, Hæmonchus contortus.—This experiment was to determine whether regular monthly drenching in an area in which losses in sheep from worm infestation are of frequent occurrence would control these parasites. Three groups of lambs were selected. One group was held as untreated controls and the second and third groups were given monthly treatments with copper sulphate and carbontetrachloride respectively. The lambs were weighed monthly and fæcal samples taken when possible to determine the effect of the treatments upon the stomach-worm population. When the experiment was discontinued at the end of eleven months it was found that the average gain in weight by the copper sulphate group was 18·9 lb.; by the carbontetrachloride group 15·8 lb.; and by the untreated controls 8·2 lb. Fæcal cultures showed that stomach-worm larvæ in the control group increased from 5 per cent. to 84 per cent.; in the carbontetrachloride group from 12 per cent. to 25 per cent.; and in the copper sulphate group from 9 per cent. to 17 per cent. It was concluded that regular monthly treatment with either copper sulphate or carbontetrachloride will give a satisfactory control of the stomach worm, with a preference for copper sulphate.

Ascaris Lumbricoides in Pigs.—The investigation dealing with this pig parasite was concluded early in the year. The results have been published as Bulletin No. 1 of this Station.

Ascaridia galli in Chickens.—An investigation into the life cycle, pathogenicity, and control of this roundworm was commenced early in the year. To date much of this investigation has been completed and the therapeutic aspect of the problem is now under investigation. The life cycle as determined by the writer differs in several aspects from that recorded by other workers, especially in the duration of the prepotent period which was found to be in the vicinity of 27 days. This period was determined by American workers to be about 50 days. Certain information has also been secured with regard to the pathogenicity of this roundworm, which it is hoped should enable a diagnosis of the disease associated with its presence to be given with greater certainty than in the past.

The Distribution of the Gastro-Intestinal Parasites of Sheep in Queensland.—An attempt is being made to determine the distribution of the various gastro-intestinal parasites of sheep in Queensland. Sets of lamb's bowels are being forwarded from various parts of the State and are being examined in the laboratory for the presence of worms as carefully as possible. The investigation has already shown that very few sheep even in the hottest and driest parts of the State are entirely free from worms, *Hæmonchus contortus, Trichostrongylus colubriformis,* and *Cooperia punctata* being extremely widespread. *Trichostrongylus falculatus and Oesophagostomum venulosum* are recorded from this State for the first time.

Identifications.—Throughout the year a number of identifications of various species of external and internal parasites were made.

PUBLICATIONS.

The following articles were published in the *Queensland Agricultural Journal* in the course of the year, and issued subsequently in bulletin or advisory leaflet form:—

The Animal Parasites of Domesticated Animals and their Control. Advisory Leaflet No. 1.

Parasites of the Pig. Advisory Leaflet No. 2.

Parasites of Sheep. Advisory Leaflet No. 3.

Parasites of the Horse. Advisory Leaflet No. 5.

Parasites of Poultry. Advisory Leaflet No. 6.

Parasites of Cattle. Advisory Leaflet No. 7.

Parasites of the Dog and Cat. Advisory Leaflet No. 8.

The Large Roundworm of Pigs, *Ascaris lumbricoides* L., 1758; It's Life History in Queensland, Economic Importance, and Control. Bulletin No. 1.

The Anthropod Parasites of Domesticated Animals in Queensland. (Published in the Australian Veterinary Journal, Vol. XI., No. 1. 1935.)

POULTRY NUTRITIONAL EXPERIMENTS.

Mr. J. E. Ladewig, B.Ag.Sc., Experimentalist, reports:—

CHICKEN RAISING EXPERIMENTS.

With the object of confirming some results obtained in previous tests, and determining the

most economic age at which the feeding of a high protein content could be discontinued, certain experiments were outlined by the Poultry Advisory Committee. These experiments were conducted at the Animal Health Station during the period 1933 to 1935, and embrace tests with light breeds and heavy breeds.

Experiments with White Leghorns.

Experiments conducted previously, have shown that it is essential to feed a ration with a high protein content, to chicks in the early stages of growth, in order to obtain the maximum development. However, these experiments have also indicated that it might not be necessary to continue to feed the high protein ration after the chicks reach a certain age.

An experiment was initiated on 11th September, 1933, with the object of determining at what stage in the rearing of chicks the high protein ration could be replaced by a ration with a lower protein content in order to minimise the rearing costs. The all-mash system of feeding was adopted for these experiments, as this system facilitates the accurate recording of food consumption, and allows a homogeneous sample of food to be kept before the birds at all times.

The birds were housed in brooder pens (20 feet by 5 feet) for the first six weeks, after which they were transferred to larger pens (20 feet by 10 feet). The colony brooder system was used to rear the chickens. Feeding was commenced 36 hours after hatching, the food being placed in shallow trays about 1 inch deep. The size of these trays was increased as the chicks grew, until at 4 weeks old, the chicks were given their feed in trays 5 inches deep. The food in the trays was covered with wire netting to prevent wastage due to scratching.

Rations.—When deciding upon the ration to be used in this experiment, experience gained in previous experiments was used as a guide. Liberal use was made of milk products for the first six weeks, after which they were replaced by cheaper protein foods. The rations used were as follows:—

Ration.	High Protein Ration (A).	High Protein Ration (B).	Low Protein Ration.
	Lb.	Lb.	Lb.
Maize meal	56	56	63
Bran	12	12	13·5
Pollard	12	12	13·5
Dried buttermilk ..	14	5	2·5
Mebo meal	6	10	5·
Lucerne meal ..	0	5	2·5
Cod liver oil ..	1	1	1
Salt	1	1	1
Cost per 100 lbs. ..	9s. 8d.	8s. 4d.	7s. 9d.

Three hundred and twenty White Leghorn chicks were obtained at day old, were divided into four lots, each lot was weighed collectively and placed in separate pens. The four pens were all fed high protein ration (A) up to six weeks old and conditions were kept as even as possible. The birds in each pen were weighed collectively at three weekly intervals, and food consumption was recorded for the same periods. At six weeks old, the cockerels were removed and the pullets were placed in larger pens (20 feet by 10 feet). At this period definite changes were also made in rations fed. The lot in pen 1 were placed upon the low protein ration, while those pens 2, 3, and 4 were supplied with ration high protein (B). At nine weeks of age the lot in pen 2 were placed on the low protein ration. Similar action was taken with those in pen 3 at twelve weeks, and those in pen 4 at fifteen weeks. Consequently from this period onward all lots were being fed the low protein.

Table 1.

Age.	Pen 1.		Pen 2.		Pen 3.		Pen 4.	
	Weight.	Food consumed.	Weight.	Food consumed.	Weight.	Food consumed.	Weight.	Food consumed.
	Oz.	Oz.	Oz.	Oz.	Oz.	Oz.	Oz.	Oz.
Day old..	1·25	..	1·25	..	1·25	..	1·24	..
At 3 weeks old ..	6·88	11·78	6·80	12·16	7·08	12·39	6·84	12·47
At 6 weeks old ..	15·37	40·71	16·20	42·00	16·00	42·18	15·89	42·76
At 9 weeks old ..	24·21	78·71	25·64	80·66	27·50	81·78	27·16	81·71
At 12 weeks old ..	31·60	122·41	30·21	125·56	33·00	132·48	32·84	126·61
At 15 weeks old ..	38·20	168·01	38·40	173·86	40·70	176·18	40·95	177·71
At 18 weeks old ..	43·90	220·41	43·60	233·36	44·50	228·68	46·30	231·11
At 21 weeks old ..	52·50	279·31	52·00	297·06	53·50	285·38	53·50	289·01
Total food costs ..	16·71d.		17·76d.		17·37d.		17·77d.	
Food costs per oz. gain in weight	·326d.		·350d.		·333d.		·340d.	

Table 1 gives the average weights of pullets at the different ages, and the average total food consumption from the commencement of the test. The total food costs as well as the food costs per ounce gain in weight are also shown.

An examination of Table 1 shows that there is no significant difference in the final weights of the birds reared under the different methods of feeding used in this experiment. When the live weight gains are considered in relation to the food costs, it is found that the birds, fed the high protein ration to six weeks only (Pen 1), gave a slightly better result than the others. The differences, however, were not significant, as these differences were not greater than the experimental error which occurs under the group system of experimentation.

However, these experiments have indicated that there is no advantage to be gained by feeding the high protein ration after the chicks are six weeks old. There was no apparent difference in the general appearance of the birds in the different pens at maturity.

Due to the fact that no significant differences were observed in this experiment, it was necessary to duplicate this work in the following year. As a result, a similar experiment was initiated on 1st August, 1934, 300-day old White Leghorn pullets being used in this case. The plan of the experiment was altered slightly, as experience obtained subsequent to the 1933 experiment had shown that the feeding of the high protein ration to fifteen weeks was definitely of no advantage. The chickens were divided into three pens, each of which contained 100 birds. At six weeks old, the birds in each pen were divided into two even lots and each lot was placed in larger pens (20 feet by 10 feet). These for reference will be known as Pens 1A and 1B, Pens 2A and 2B, and Pens 3A and 3B.

From this period onward the birds in each pair of pens were treated in all respects similarly. The birds in Pens 1A and 1B were changed to the low protein ration, whilst the birds in 2A and 2B and 3A and 3B were fed high protein ration B. At the age of nine weeks the birds in Pens 2A and 2B were placed on the low protein ration and similar action was taken with Pens 3A and 3B at the age of twelve weeks. Therefore, from the age of twelve weeks, all groups were being fed upon the low protein ration.

The duplication of the treatments was adopted in this experiment in order to determine the differences which might occur in two pens under the same conditions, due to experimental error. The birds in this experiment were reared in exactly the same manner and under the same conditions as the birds in the 1933 experiment, so that the results of the two experiments would be comparable.

Table 2 gives the average weights of pullets at the different ages, and the average total food consumption from the commencement of the test. The total food costs as well as the food costs per ounce gain in weight are also shown.

Table 2.

Age.	Pen 1.		Pen 2.		Pen 3.	
	Weight.	Food consumed.	Weight.	Food consumed.	Weight.	Food consumed.
	Oz.	Oz.	Oz.	Oz.	Oz.	Oz.
Day old	1·32	..	1·31	..	1·34	..
At 3 weeks old	6·08	11·36	6·00	10·84	6·02	11·82
At 6 weeks old	14·49	37·85	14·35	37·79	14·97	37·31
At 9 weeks old	21·70	75·70	21·37	72·55	23·44	74·18
At 12 weeks old	31·42	122·92	30·85	117·54	33·61	122·90
At 15 weeks old	38·86	173·69	38·62	172·26	41·46	175·70
At 18 weeks old	46·32	225·53	43·33	223·46	45·78	227·63
At 21 weeks old	52·60	283·49	51·77	280·60	54·87	286·91
Total food costs	17·30d.		17·25d.		17·85d.	
Food costs per oz. gain in weight	·338d.		·342d.		·334d.	

Table 2 confirms the results obtained in the previous experiment—namely, that there is no definite advantage in the feeding of a high protein ration after chickens of the leghorn variety reach the age of six weeks.

Table 3 has been prepared to indicate the differences in weight that may occur among pens of birds reared and fed under similar conditions.

Table 3.

Age.	Pen 1.		Pen 2		Pen 3.	
	A.	B.	A.	B.	A.	B.
	Oz.	Oz.	Oz.	Oz.	Oz.	Oz.
6 weeks	14·79	14·83	14·58	14·67	15·39	15·15
9 weeks	22·04	21·36	21·41	21·33	23·13	23·75
12 weeks	31·50	31·33	30·91	30·79	33·83	33·39
15 weeks	39·00	38·72	38·73	38·51	42·35	40·37
18 weeks	43·87	43·36	43·27	43·40	46·00	45·57
21 weeks	53·04	52·17	51·82	51·72	54·87	54·87

Experiments with Heavy Breeds.

Previous experiments with heavy breeds indicated that it would be advantageous to feed a high protein ration to such birds for a longer period than leghorns. With the object of determining if such were so, two tests were conducted during 1934-35, with two different breeds.

The general system of brooding, housing, and feeding was in all respects similar to the tests already outlined.

Australorps.

For this test 275-day old chickens were purchased. They were divided into three lots as equal as possible in every respect and placed in separate pens.

All pens were fed the high protein ration A until they were six weeks of age. At this period the males were removed and the test continued with pullets only.

Pen 1 was at six weeks placed upon the low protein ration, and Pens 2 and 3 upon the high protein ration B. At nine weeks Pen 2 was placed upon the low protein ration, and at twelve weeks Pen 3 was treated similarly.

Table 4 gives the average weights of the pullets at different ages and the average total weight of food consumption from the commencement of the test. The total food costs as well as the food costs per ounce gain in weight are also shown.

Table 4.

Age,	Pen 1.		Pen 2.		Pen 3.	
	Weight.	Food Consumed.	Weight.	Food Consumed.	Weight.	Food Consumed.
	Oz.	Oz.	Oz.	Oz.	Oz.	Oz.
Day old	1·30	..	1·29	..	1·30	..
3 weeks	6·25	10·81	5·98	10·48	6·07	10·69
6 weeks	16·84	44·21	16·76	43·73	16·11	42·34
9 weeks	28·87	90·32	27·36	85·81	28·43	84·89
12 weeks	37·60	141·06	39·92	141·23	39·92	136·59
15 weeks	49·53	204·32	49·88	201·9	50·47	196·63
18 weeks	55·18	264·85	57·28	261·02	57·36	256·78
21 weeks	65·06	327·64	64·00	324·02	64·09	319·33
Total food costs	20·01d.		19·93d.		19·87d.	
Food costs per oz. gain in weight	·314d.		·318d.		·317d.	

From Table 4 the only conclusion possible to arrive at is that there is no advantage to be gained by feeding a ration of a high protein content for a period any longer than six weeks. It must, however, be pointed out that Australorp used in this test appears to be small, the standard weight of a pullet being 5 lb. There was an outbreak of coccidiosis in this test and the lack of size may be attributed to this.

Light Sussex.

In this test 200-day old chickens were procured. They were culled down upon receipt to 196 and then divided into two lots as equal as possible.

Each lot was placed in a separate pen and the general system of management and the rations used for the test were similar to the tests already referred to.

Both lots were placed upon the high protein ration A for the first six weeks. The cockerels were then removed and the pullets in Pen 1 placed upon the low protein ration and those in Pen 2 upon the high protein ration B. At twelve weeks of age the pullets in Pen 2 were placed upon the low protein ration.

Table 5 gives the average weight of the pullets at different ages and the average total weight of food consumption from the commencement of the test. The total food costs as well as the food costs per ounce gain in weight are also shown.

Table 5.

Age.	Pen 1.		Pen 2.	
	Weight.	Food Consumed.	Weight.	Food Consumed.
	Oz.	Oz.	Oz.	Oz.
Day old	1·23	..	1·23	..
3 weeks	6·54	10·17	6·54	10·58
6 weeks	14·35	40·70	14·91	40·92
9 weeks	26·12	85·88	25·71	81·78
12 weeks	36·32	135·15	41·14	139·38
15 weeks	47·39	191·33	52·31	203·51
18 weeks	54·73	258·54	57·69	266·28
21 weeks	62·42	331·99	67·49	336·54
Total food costs	20·22d.		20·89d.	
Food costs per oz. gain in weight	·331d.		·315d.	

This experiment was also interfered with by an outbreak of coccidiosis, but from a study of the table there appears to be an advantage to be gained by extending the period of supply of a high protein ration for a longer period than six weeks.

Summary.

From these and preceding tests the following conclusion can be drawn:—

1. That a ration with a crude protein content of 18 to 19 per cent. (based upon average analyses of food stuffs) should be fed to—
   (*a*) Leghorn and light breed chickens for the first six weeks.
   (*b*) Heavy breeds for a slightly longer period (according to the size of the bird).
2. That the crude protein content of ration after the foregoing periods should be reduced to from 14 to 15 per cent.
3. That although no comparison test has been made, it has been noted in tests conducted that the inclusion of milk foods has a beneficial effect and should be included in all rations fed to chickens in the early stages of development.

Egg Production Experiment.

This experiment was conducted as a continuation of the Chicken Raising Experiment which finished on 5th February, 1934. The objective of this egg-production experiment was to determine the effect upon egg production, of different methods of feeding chicks during the rearing period.

Four pens of birds were obtained at the conclusion of the rearing test; Pen 1 had been fed the high protein ration to six weeks old, when it was replaced by a low protein ration; Pen 2 received the high protein ration to nine weeks, Pen 3 the high protein ration to twelve weeks, and Pen 4 up to fifteen weeks old.

In order to determine the relative effects upon egg production of these four methods of feeding, it was necessary to feed a uniform ration to all the pens and to subject all the pens to the same conditions throughout the test.

The ration fed was a follows:—Maizemeal, 57 per cent.; bran, 19 per cent.; pollard, 9½ per cent.; lucerne meal, 9½ per cent.; nebo meal, 3½ per cent.; linseed meal,. 1½ per cent.; crude protein content, 14 per cent.

Supplement.—1 lb. fine salt to 100 lb. of the above mixture. The birds were housed under the intensive system in pens 20 feet by 10 feet, approximately forty birds being placed in each pen. The food was given as dry all-mash and was provided in self feeding hoppers. Shell grit was kept before the birds at all times.

The eggs produced were collected once daily, and the number and weight of eggs from each pen was recorded daily. The food consumption was recorded and total consumption was assessed at four weekly intervals. Table 1 gives the total egg production and food costs over the period of the test:—

Table 1.

Age.	Pen 1.		Pen 2.		Pen 3.		Pen 4.	
	Number of Eggs.	Food Costs.	Number of Eggs.	Food Costs.	Number of Eggs.	Food Costs.	Number of Eggs.	Food Costs.
		d.		*d.*		*d.*		*d.*
1st month ..	16·6	4·66	14·5	4·58	16·4	4·99	14·0	4·69
2nd month	34·1	9·86	30·4	9·58	30·2	10·19	30·0	9·79
3rd month	51·3	14·77	46·9	14·73	41·8	15·05	45·1	14·65
4th month	66·6	19·87	63·7	20·03	51·1	19·85	57·4	19·35
5th month	81·5	24·92	81·4	25·92	62·9	25·09	70·4	24·87
6th month	98·5	30·6	98·3	31·98	78·9	31·3	89·3	31·24
7th month	119·2	37·12	118·5	38·77	97·4	37·99	108·5	37·85
8th month	140·8	43·48	139·3	45·96	116·0	44·52	128·1	44·39
9th month	161·1	49·49	159·8	52·07	133·1	50·02	144·1	50·1
10th month	179·96	56·2	178·81	58·92	150·37	56·27	159·74	56·12
11th month	196·62	62·06	195·75	64·79	166·45	62·05	175·59	61·06
12th month	211·73	67·51	212·0	70·9	181·19	67·68	191·39	68·53
13th month	222·67	73·11	227·31	76·93	194·16	73·52	205·69	74·59
Food costs per egg produced	·328d.		·338d.		·379d.		·363d.	

An examination of the results in Table 1 shows that there were marked differences in the results obtained in some of the pens.

Pens 1 and 2 produced approximately the same number of eggs at the different stages throughout the test, and at the end of the test there was a difference of only 4·64 eggs per bird between these two pens. Whilst Pen 2 laid the most eggs the food costs were correspondingly higher than those of Pen 1, so that when the results are analysed in terms of food costs per egg produced, the difference between these two pens is not significant. Similarly when the results from Pens 3 and 4 are analysed the differences prove to be insignificant.

However, when the results from Pens 1 and 2 are compared with those from Pens 3 and 4 marked differences are observed. Whilst the average egg production of all the birds in Pens 1 and 2 is 225 eggs, that of Pens 3 and 4 is 200. This represents a difference between these two groups of over 10 per cent.

There was no significant difference between the pens which were given the high protein ration to six and nine weeks respectively; this indicates that high protein feeding should be replaced by the cheaper low protein feeding when the chicks reach the age or six to nine weeks.

Health of Birds.

The results given above are further substantiated when we consider the general health of the birds in the different pens. The birds in Pens 1, 2, and 3 were reasonably healthy throughout the test; the birds in Pen 4, however, were in an unsatisfactory state of health, the droppings being watery and the feathers in the region of the vent were continually soiled. At the conclusion of the test, a post-mortem examination of some of these birds was made, and marked kidney degeneration was noted. This kidney degeneration is probably associated with too much high protein feeding during the rearing period.

Conclusions.

1. That chicks should not be fed a ration with a high crude protein content after they are nine weeks old, as the continuation of the high protein feeding after this age has a harmful effect upon the future egg-producing capacity of the chicks.

2. The feeding of the following rations gives very satisfactory results for rearing chicks with the object of maximum egg production when they mature.

——	High Protein Ration (A).	High Protein Ration (B).	Low Protein Ration.
	Lb.	Lb.	Lb.
Maizemeal	56	56	63
Bran	12	12	13·5
Pollard	12	12	13·5
Dried buttermilk ..	14	5	2·5
Mebo meal	6	10	5·0
Lucerne meal ..	0	5	2·5
Cod liver oil ..	1	1	1
Salt	1	1	1

The High Protein Ration (A) should be fed until the chicks are six weeks old, when it is replaced by the High Protein Ration (B). At nine weeks old the feeding of this ration should be discontinued and the low protein ration substituted. The chicks are then fed on the Low Protein Ration until they reach maturity.

Egg Production Test with White Leghorns.

The objective of this test was to determine the relative value of rations with different protein levels for feeding laying hens. With this objective in view an experiment was commenced on 25th April, 1933; 116 White Leghorn pullets were obtained and were divided into three even lots and placed in separate pens.

The birds were housed under the intensive system in pens 20 feet by 10 feet, with about thirty-nine birds to each pen. The composition of the rations fed was as follows:—

—	Low Protein Ration.	Intermediate Protein Ration.	High Protein Ration.
	Lb.	Lb.	Lb.
Maizemeal	57	54	51
Bran	19	18	17
Pollard	9½	9	8½
Lucerne meal ..	9½	9	8½
Mebo meal	3½	7	10½
Linseed meal ..	1½	3	4½
Salt	1	1	1
Crude Protein content	14%	16%	18%

The rations were fed in the dry state in self-feeding hoppers and a continuous supply of shell grit was kept before the birds.

During the first twelve months of the experiment there was a rather heavy mortality in all of the pens, due to vent picking, but this is a vice which is generally associated with the housing of heavy producing birds under the intensive system.

At the end of the first twelve months there was no significant difference in the results from the three treatments. At this stage, the birds being fed the low protein ration had laid 209 eggs per bird and the cost of the food consumed was 79d.; the birds being fed the intermediate protein ration laid 194 eggs with food costs of 75d.; and those on the high protein ration laid 209 eggs and the cost of food was 80d. The experiment was then extended for a further twelve months. At the end of the second twelve months of the experiment the results for the two years of the test were as follows:—

—	Number of Eggs.	Food Consumed.	Food Costs.	Food Costs per Egg Laid.
		Oz.	*d.*	*d.*
Low Protein ..	363·0	2,839·9	149·3	·411
Int. Protein ..	356·2	2,715·4	147·8	·415
High Protein ..	365·3	2,745·7	152·1	·416

To illustrate the variation in egg production which has occurred throughout the two years of the test, Table 1 has been prepared. This table gives the average total egg production per bird for monthly periods (28 days) and the average total food costs for the same periods:—

TABLE I.

—	14% Protein Ration.		16% Protein Ration.		18% Protein Ration.	
	No. of Eggs.	Food Costs.	No. of Eggs.	Food Costs.	No. of Eggs.	Food Costs.
		Pence.		Pence.		Pence.
1st month	16	5	15	5	15	5
2nd month	29	10	26	9	27	11
3rd month	40	15	35	14	39	16
4th month	52	22	48	21	54	23
5th month	70	29	68	28	73	31
6th month	91	37	90	35	94	39
7th month	111	44	111	42	116	45
8th month	129	49	129	48	135	50
9th month	150	56	146	53	154	56
10th month	169	61	162	59	172	62
11th month	186	68	178	66	188	69
12th month	202	74	190	71	203	74
13th month	208	78	194	75	209	79
14th month	209	82	195	79	209	83
15th month	209	87	196	84	210	87
16th month	213	92	200	89	217	92
17th month	221	97	212	93	231	97
18th month	237	103	231	99	249	104
19th month	255	109	251	106	268	110
20th month	275	115	271	113	286	117
21st month	295	122	291	120	305	124
22nd month	313	128	311	126	323	130
23rd month	330	133	329	133	340	136
24th month	346	139	344	138	355	142
25th month	357	144	353	143	364	147
26th month	363	149	356	148	365	152
Food costs per egg produced per bird ..	·411d.		·415d.		·416d.	

An examination of these results shows that there is not a significant difference in the results obtained from the three treatments.

Conclusions.

Provided the ration is well balanced, variation of the crude protein level between 14 per cent. and 18 per cent. does not appear to affect egg production—i.e., a ration with a crude protein content of 14 per cent. proves as satisfactory for feeding laying hens as a ration with a higher protein content (16 per cent. or 18 per cent.).

Cockerel-raising Experiment.

The objective of this experiment was to determine the protein level which would be the most satisfactory in rations for raising cockerels and also to determine the relative efficiency of meat and milk foods as protein supplements. Two breeds of fowls were used for this work—viz., Australorps and Light Sussex.

Pen-rearing Tests with Australorps.—Ninety cockerels at six weeks old were used in this test, and were evenly divided into 6 groups containing 15 birds each, and each group was placed in a pen 20 feet long by 5 feet wide.

The food was given in the dry form and was kept before the birds at all times. The rations fed were as follows:—

	Low Protein.		Intermediate Protein.		High Protein.	
	Group 1.	Group 2.	Group 3.	Group 4.	Group 5.	Group 6.
	%	%	%	%	%	%
Maize meal	79	83½	70½	79	61½	75
Lucerne meal	12	12	12	12	12	12
Dried buttermilk	9	..	17½	..	26½	..
Mebo meal	..	4½	..	9	..	13
Crude Protein content	13	13	15	15	17	17

Supplements.—1 per cent. fine salt; 1 per cent. cod liver oil.

In the rations fed to Groups 1, 3, and 5 dried buttermilk provided the major part of the protein requirements of the birds. For reference these rations will be termed the "milk" rations. Mebo milk provided the protein requirements of the birds in Groups 2, 4, and 6; these rations will be termed the "meat" rations.

Table 1 shows the average weight of the birds in the different groups at weekly intervals from 14 to 20 weeks.

Table I.

Age.	13% Protein.		15% Protein.		17% Protein.	
	Milk.	Meat.	Milk.	Meat.	Milk.	Meat.
	Oz.	Oz.	Oz.	Oz.	Oz.	Oz.
6 weeks	20·4	20·4	20·7	20·9	21·2	21·3
14 weeks	56·5	45·1	62·9	55·7	67·0	52·9
15 weeks	61·3	48·8	66·9	60·0	72·7	58·6
16 weeks	63·5	53·1	72·5	64·3	75·9	63·1
17 weeks	65·6	56·8	73·6	65·6	76·6	66·9
18 weeks	70·5	62·1	77·9	71·3	84·1	69·6
19 weeks	71·5	65·0	81·2	76·1	88·6	72·9
20 weeks	75·5	69·5	82·7	80·5	93·4	78·1
Food costs	20·7d.	16·0d.	24·4d.	19·7d.	28·0d.	18·7d.
Food costs per oz. gain in weight	·375d.	·327d.	·393d.	·331d.	·388d.	·327d.

The milk-fed birds in all cases grew more rapidly than the meat-fed birds, but this was more noticeable in the groups being fed the high protein rations, where a difference of 15 oz. between the milk and meat fed birds was observed.

However, due to the high cost of dried buttermilk per unit of protein supplied, the cost of rearing the birds on the milk rations was much higher than for the meat-fed birds.

There was no appreciable difference in the general appearance of the birds in the different groups. Taking all factors into consideration, the ration which gave the most satisfactory results was the one containing 17 per cent. crude protein and in which mebo meal was used as the protein food (Group 6).

In this group the birds were 5 lb. in weight at 20 weeks old, and the food costs at this stage were 18·7d. Group 4 gave only slightly inferior results, followed by Group 3.

The differences between the respective groups is illustrated in Table 2, which shows the age at which the birds reached an average live weight of 70 oz. and the food costs at this stage.

Table 2.

	Weight of Birds.	Age.	Cost.	Cost per oz. Gain in Weight.
	Oz.	Weeks.	*d.*	*d.*
Group 1	70·5	18	17·6	·325
Group 2	69·5	20	16·0	·327
Group 3	72·5	16	16·9	·326
Group 4	71·3	18	16·2	·321
Group 5	72·7	15	17·1	·332
Group 6	69·6	18	15·6	·322

Pen-rearing Tests with Light Sussex.—Sixty cockerels at 6 weeks old were used in this test and were evenly divided into 6 groups containing 10 birds each, and each group was placed in a pen 20 feet long by 5 feet wide.

The rations fed in this test were exactly the same as those fed to the Australorps, and the same method of feeding was used. Table 3 shows the average weight of the birds in the different groups at weekly intervals from 14 to 20 weeks.

TABLE 3.

AGE.	13% PROTEIN.		15% PROTEIN.		17% PROTEIN.	
	Milk.	Meat.	Milk.	Meat.	Milk.	Meat.
6 weeks	15·0	15·9	16·1	16·0	15·8	16·2
14 weeks	45·9	34·3	56·0	46·8	62·7	46·6
15 weeks	50·9	39·3	61·8	51·4	67·4	52·6
16 weeks	54·2	40·8	64·8	55·2	70·4	54·4
17 weeks	56·7	43·0	66·4	56·8	76·4	55·6
18 weeks	64·0	46·3	70·8	62·6	83·6	58·9
19 weeks	69·1	48·0	75·8	68·4	90·0	64·0
20 weeks	73·8	52·0	81·1	74·0	95·0	70·0
Food costs	23·3d.	15·5d.	24·2d.	20·9d.	31·2d.	18·6d.
Food costs per oz. gain in weight	·396d.	·429d.	·372d.	·361d.	·394d.	·334d.

The milk-fed birds grew more rapidly than the meat-fed birds, differences of 25 oz. per bird being observed at 20 weeks old in the groups being fed the ration with 17 per cent. crude protein content.

From the point of view of costs, the feeding of rations containing dried buttermilk has, again, proved to be too expensive.

The ration giving the most satsifactory result in this test was the one containing 17 per cent. crude protein and in which mebo meal was used as the protein food. In this group the birds were 4½ lb. in weight at 20 weeks old, and the food costs at this stage were 18·6d.

The ration next in order of merit was the one containing 17 per cent. protein and in which dried buttermilk was used as the protein food.

Table 4 shows the age at which the birds reached an average live weight of 70 oz. and the food costs at this stage.

TABLE 4.

——	Weight of Birds.	Age.	Cost.	Cost per oz. Gain in Weight.
	Oz.	Weeks.	*d.*	*d.*
Group 1	69·1	19	21·3	·393
Group 2	*52·0	20	15·5	·429
Group 3	70·8	18	19·8	·363
Group 4	68·4	19	19·1	·365
Group 5	70·4	16	19·3	·353
Group 6	70·0	20	18·6	·334

* The birds in this group grew very slowly, being only 52 oz. in weight at 20 weeks old.

A feature of note in these pen-rearing tests with both the Australorp and Light Sussex was the very rapid growth rates in the groups fed on the ration with 17 per cent. crude protein content and containing dried buttermilk as the protein supplement. The birds in these groups weighed approximately 6 lb. at 20 weeks old; owing to the high food costs, however, this ration would not be satisfactory in practise for the rearing of cockerels.

Conclusions from the Pen-rearing Tests—

1. Due to its cheapness per unit of protein content, mebo meal is more satisfactory than dried buttermilk for providing the protein requirements of growing cockerels.
2. (*a*) When mebo meal is fed in conjunction with maizemeal and lucerne meal, the best results are obtained when used in the following proportions:—

   Maizemeal .. .. 75 lb.
   Lucerne meal .. 12 lb.
   Mebo meal .. .. 13 lb.

   (*b*) The rations fed to Groups 3, 4, and 5 in these tests give results only slightly inferior to those obtained when the above ration is used.

BATTERY TESTS WITH AUSTRALORPS AND LIGHT SUSSEX.

In this test 30 Australorp and 30 Light Sussex cockerels at 6 weeks old were each divided into three groups containing ten birds each. Each group was placed in a separate compartment of the battery and the following rations were fed *ad lib.* in the dry state:—

——	AUSTRALORPS.			LIGHT SUSSEX.		
	Group 1.	Group 2.	Group 3.	Group 4.	Group 5.	Group 6.
	%	%	%	%	%	%
Maize meal	79	70½	61½	79	70½	61½
Lucerne meal	12	12	12	12	12	12
Dried buttermilk	9	17½	26½	9	17½	26½
Crude Protein content	13	15	17	13	15	17

SUPPLEMENTS.—1% salt.
1% cod liver oil.

Dried buttermilk was used as the protein supplement in all these rations, the object of this test being to determine the protein level which would be the most satisfactory in rations for rearing cockerels in batteries.

In order to indicate the rate of development in the different groups Table 5 has been prepared showing the average weight of the birds at the different stages of growth.

TABLE 5.

Showing age in weeks and weight of bird in ounces.

Age.	Group 1.	Group 2.	Group 3.	Group 4.	Group 5.	Group 6.
	Oz.	Oz.	Oz.	Oz.	Oz.	Oz.
6 weeks	21·7	20·9	21·2	18·1	17·2	17·0
9 weeks	31·3	37·1	39·5	29·1	32·1	31·0
10 weeks	37·4	42·3	45·1	33·5	37·3	38·3
11 weeks	40·4	45·1	46·6	38·3	41·3	43·8
12 weeks	44·9	51·9	56·6	40·3	47·0	50·5
13 weeks	49·1	56·9	61·4	46·3	51·5	57·3
14 weeks	52·9	61·6	66·8	48·7	54·9	61·5
15 weeks	55·2	64·3	70·4	53·1	61·0	67·0
16 weeks	60·4	70·0	73·6	57·1	65·8	74·0
Food costs	13·7d.	15·7d.	19·7d.	16·0d.	16·3d.	20·3d.
Food costs per oz. gain in weight	·354d.	·318d.	·375d.	·409d.	·332d.	·358d.

In all the groups the growth rate appears to bear a definite relationship to the protein level of the ration, the best growth rates being observed in Groups 3 and 6, both of which were fed the ration with a 17 per cent. protein content.

When costs are taken into consideration, however, the ration with the 15 per cent. crude protein content gives the best results. This applied to both the Australorps and Light Sussex.

Table 6 has been prepared to indicate the age at which the birds in the different groups reached an average light weight of 60 oz. as well as the food costs at this stage.

TABLE 6.

——	Weight of Bird.	Age.	Cost.	Cost per oz. gain in weight.
	Oz.	Weeks.	*d.*	*d.*
Group 1	60·4	16	13·7	·354
Group 2	61·6	14	12·4	·305
Group 3	61·4	13	12·9	·321
Group 4	57·1	16	16·0	·409
Group 5	61·0	15	14·3	·321
Group 6	61·5	14	15·9	·357

CONCLUSIONS FROM BATTERY TESTS.

1. That of the rations used in this test the one with 15 per cent. crude protein content proved to be the best; it was slightly inferior to the ration with the 17 per cent. protein content one in growth rates, but from the point of view of food costs it was superior to the other rations used.

PIG-FEEDING EXPERIMENTS.

A series of pig nutritional experiments was commenced in the course of the year.

The objective of these tests was to determine whether pigs could be economically raised to pork and bacon weights suitable for the export market with the complete exclusion of milk foods from the ration. Meat meal, manufactured by the Queensland Meat Industry Board at the Brisbane Abattoir, was used as the protein supplement, as this is a source of protein which is reasonably cheap, and large quantities of which are available locally at the Brisbane Abattoir. These tests were initiated in an endeavour to solve one of the major problems of the pig industry in Queensland. Climatic conditions in Queensland are not favourable to the continuous production of pigs throughout the year. There are periods of dry weather when crop growth is seriously interfered with, when natural and artificial pastures fail to produce as they would do during normal seasons. The winter season, while not a long or harsh one, is very often a dry one, followed by dry weather during the spring months. These conditions on farms lead to a diminishing supply of dairy by-products—skim milk in particular—as food for pigs, and in the absence of an economical substitute for skim milk pig production falls off, becomes less profitable, and both local and export markets are affected.

With the object of finding an economical substitute for skim milk, these tests were commenced in February, 1934, and finished in May, 1935. For the purpose of this experiment the four principal breeds of pigs have been used both in the pure-bred form and with reciprocal crosses of the several types, the objective throughout being the production of a white-skinned pig for the export trade.

The breeds and crosses used were:—Large White, Middle White, Tamworth, Berkshire, Berkshire x Large White, Berkshire x Tamworth, Berkshire x Middle White, Tamworth x Large White, Tamworth x Berkshire, Middle White x Large White, Middle White, Tamworth x Middle White.

This series of crosses has given a fairly comprehensive range of pigs with which to ascertain the value of a ration.

The pigs were housed under the intensive system, being confined to pens 18 in. x 8 in., half covered in; the covered part was floored with hardwood, whilst the open portion was floored with concrete.

RATIONS FED.

The ration used in these experiments was as follows:—Maizemeal, 45 per cent.; pollard, 40 per cent.; meat meal, 8 per cent.; lucerne chaff, 7 per cent.

A mineral supplement consisting of 75 per cent. calphos and 25 per cent. salt was added to the ration at the rate of 2 lb. per 100 lb. of the above mixture.

An analysis of this mixture gave the following results:—

	Per cent.
Moisture	11·2
Protein	18·0
Fibre	4·5
Fat	4·0
Carbohydrates	57·2
Ash	5·1
*Lime (CaO)	0·829
*Phosphoric Acid (P_2O_5)	1·749
*Salt	0·73

* Included in ash.

Clean drinking water was provided, and a suitable amount of green foder was given to the pigs at mid-day. This fodder consisted chiefly of green paspalum, but green lucerne was fed occasionally when available.

From the time of weaning until the completion of each animal's test the pigs were given their food, ad lib., in the dry form, in self-feeding hoppers.

Routine Work.

The pigs were reared from birth in the experimental pens; they were castrated at six weeks old, weaned at eight weks old, and were placed in the feeding test at nine weeks old, by which time they had become accustomed to this system of dry feeding.

They were regularly weighed at weekly intervals, and the food consumption was recorded for the same period. When each animal or group reached a suitable condition for marketing (either as porkers or baconers), the final weight was taken, and they were despatched to the Brisbane Abattoir for slaughter and inspection. Reports were obtained on the suitability of the carcases, which were then exported to the United Kingdom, where they were further examined and reported upon as to general suitability for British trade requirements. As an additional guide to the condition of the carcasses, one carcass from each different type of pig was sectioned across the loins, and these sections were then photographed for permanent records.

Observations.

In the early stages of these experiments it was observed that the pigs, which on external appearance, appeared to be in ideal condition for slaughter, were, upon sectioning of the full rounded carcass, mostly over-fat; this observation was substantiated by overseas reports. The pigs slaughtered during the latter period of the test have, therefore, been slaughtered in much lighter condition, a condition that usually does not appeal to the observer, but upon sectioning, these lower conditioned carcasses have shown an excellent "eye of meat" with a very desirable proportion of fat.

In these experiments it was noted that the pigs showed small growth-rates up to the age of 12 weeks in comparison with milk-fed pigs, but after this age much better growth-rates were observed. This is illustrated in Table 1, which gives the average daily gain in weight per pig, based upon the 15 litters of pigs used in these experiments.

Table 1.

Daily Gain in Live Weight per Pig.

Breed.	9-12 Weeks.	12-15 Weeks.	15-18 Weeks.	18-21 Weeks.	21-24 Weeks.
	Lb.	Lb.	Lb.	Lb.	Lb.
Tamworth x Large White	0·92	1·04	1·46	1·73	1·47
Tamworth x Large White	0·79	0·86	0·90	1·42	1·65
Tamworth x Large White	0·78	0·98	1·54	1·59	1·84
Large White	0·71	1·36	1·21	1·70	1·72
Large White	0·67	1·14	1·14	1·58	..
Middle White	0·45	0·59	1·12	1·45	..
Berkshire x Middle White	0·47	0·89	0·77	1·00	..
Berkshire x Large White	0·73	1·07	1·38	2·01	..
Berkshire x Large White	0·98	1·16	1·42	..	..
Berkshire x Large White	0·87	1·10	1·57	..	..
Berkshire x Tamworth	0·87	1·28	1·44	..	..
Tamworth x Berkshire	0·64	1·01	1·78	..	..
Middle White x Large White	0·71	1·35	1·35	..	..
Berkshire	0·65	0·83	1·17	..	..
Middle White-Tamworth x Middle White	0·50	0·92	1·37	..	..
Average daily gains based on 15 litters	0·72	1·04	1·31	1·56	1·67

The low growth rates from 9 to 12 weeks are probably due to the fact that the pigs' digestive organs at this stage are not able to efficiently utilise the nutrients in the ration, whereas from 15 weeks onwards, when the best growth rates are observed, they are sufficiently mature to make the most efficient use of their food.

When this system of feeding is compared with skim milk feeding from the point of view of growth rates, it gives inferior results up to the age of 15 weeks, after which the growth rates are much better than those obtained when skim milk is fed.

A summary of the results obtained with the different types of pigs used in this test is given in Table 2, which also includes the average results based upon 104 pigs.

Table 2.

Breed.	Final Live Weight.	Dressed Weight.	Loss on Slaughter.	Food Consumption.	Food Costs.	Food Consumption per lb. Dressed Weight.
	Lb.	Lb.	%	Lb.	d.	Lb.
Tamworth x Large White	188	142	24·4	540	404	3·80
Tamworth x Large White	160	114	28·7	399	317	3·51
Tamworth x Large White	156	113	27·6	454	364	4·03
Large White, Pure	191	143	25·2	581	442	4·13
Berkshire x Tamworth	139	105	24·4	367	285	3·50
Berkshire x Large White	107	75	29·9	221	171	2·95
Berkshire x Large White	127	86	32·3	319	254	3·71
Berkshire x Large White	118	81	31·3	256	212	3·16
Large White, Pure	111	77	30·6	254	211	3·30
Berkshire, Pure	103	74	28·2	270	216	3·65
Middle White, Pure	106	76	28·3	272	216	3·58
Tamworth x Berkshire	105	73	30·5	231	173	3·16
Middle White x Large White	97	66	32·0	234	195	3·55
Berkshire x Middle White	97	67	30·9	248	206	3·70
Middle White-Tamworth x Middle White ..	107	75	29·9	266	201	3·55
Averages based on 104 pigs	126·3	90·1	28·7	325	257	3·61

A feature of note in these results is the variation in the amount of food required to produce 1 lb. dressed weight; this figure varies from 2·95 lb. to 4.13 lb., with an average of 3.61 lb. for the whole series of pigs. This variation is probably due to the fact that some types of pigs are able to more efficiently utilise their food than other types. In this experiment it has been found that the Berkshire x Large White cross makes the best use of the food.

The average figure of 3.61 lb. of food required to produce 1 lb. of dressed weight, is less than the generally accepted figure for the meal feeding of pigs.

Financial Aspect.

When considering the financial aspect of this work, a number of factors must be considered, and many of these vary considerably, so that it is difficult to make an accurate estimate of the costs involved in raising pigs under this system of feeding. The one which varies most is that of food prices. For the purpose of this experiment they have been taken at market value over the period of the test. The cost of the ration used, therefore, has varied from .75d. to .83d. per lb., with an average cost of .79d. per lb.

When determining the cost of production of porkers and baconers under this system of feeding, the following factors must be taken into consideration:—

1. Capital value of breeding sows.
2. Cost of feeding sows.
3. Cost of buildings and equipment.
4. Cost of feeding pigs from weaning to marketing.
5. Labour costs.

Capital Value of Breeding Sows.—As the sow is purchased or reared to breeding age solely for the production of litters, the capital value of the sow must be debited to the litters reared during her breeding life. For purposes of costing it is assumed that the purchase price of a sow at the time of carrying her first litter is £4 4s. 0d., and that an average sow with reasonable care, produces seven litters during her active breeding life, with an average of eight pigs per litter. Each pig, therefore, bears a cost of 18d. towards the purchase price of the sow.

Cost of Feeding Sow.—The pigs in a litter also have to bear the feeding costs of the mother from the time of conception until the litter is weaned. Under this particular system of feeding, the average cost of feeding one sow for this period was 525d. This cost, however, could be considerably reduced under ordinary farm conditions by keeping the sows in open paddocks, where grazing would provide a large proportion of the sow's food requirements

Each pig bears a cost of 66d. for feeding the sow.

Cost of Buildings and Equipment.—The buildings and equipment used in this experiment are much more elaborate than is usually the case on most dairy farms. The depreciation cost on these buildings and equipment amounts to 10d. per pig.

Cost of Feeding Pigs from Weaning to Marketing.—The average cost of food for one pig from weaning to age of marketing in these experiments was £1 1s. 5d. This is based upon the results obtained from 104 pigs used in these experiments (see Table 2).

Labour Costs.—Using the hopper system of feeding, one man could handle 400 pigs per year. In comparison with standards applying in Queensland farms £150 per year would be considered suitable wages for a person employed in pig raising.

Labour costs are, therefore, calculated at 7s. 6d. per pig. To the farmer raising pigs but not employing labour this represents additional profit.

The following table sums up the costs incurred in producing pigs in these experiments; these costs are the average results obtained from 15 litters, representing 104 pigs, which include both porkers and baconers.

Cost of Producing Carcass Weighing 90 Lb.

	£	s.	d.
Capital value of sow	0	1	6
Feeding costs of sow	0	5	6
Cost of feeding pigs from weaning to marketing	1	1	5
Building and equipment	0	0	10
Labour	0	7	6
Total costs	1	16	9

Average weight of carcass = 90 lb.
Average value per lb. dressed weight = 5.5d.
Average value received per pig—£2 1s. 4d.
Net profit per pig—4s. 7d.
Or gross profit, excluding labour—12s. 1d.

Value of Maize when Fed to Pigs in combination with Other Foods.—Maize makes up a large part of the ration used in these experiments, and it is a food which is grown in practically all of the farming areas in Queensland. However, to economically market maize by feeding to pigs, the price realised for the pigs must cover all the costs of producing the pigs and, in addition, give a return for the maize, which is higher than the ruling market price.

The ration fed in these experiments forms a possible avenue for the profitable marketing of maize by feeding it to pigs. In order to determine whether this is so, the following tables have been prepared, based upon the results obtained in these experiments, using both porkers and baconers.

Baconers.—Four hundred and sixty-five pounds of food are required to produce a carcass weighing 121·5 lb. This amount of food is made up as follows:—

	£	s.	d.
200 lb maize (value to be determined)			
186 lb. pollard, at 6s. 6d. per 100 lb.	0	12	1
37 lb. meat meal, at 10s. per 100 lb.	0	3	8
33 lb. lucerne chaff, at 5s. per 100 lb.	0	1	8
Total food costs, excluding maize..	0	17	5
Labour costs (estimate of time employed per pig)	0	7	6
Cost of feed sows (per pig) ..	0	5	6
Capital value of sow (per pig) ..	0	1	6
Buildings and equipment (per pig)	0	0	10
Total cost (excluding maize) of producing carcass weighing 121.5 lb.	£1	12	9

Bacon Prices.	Value of Carcass Weighing 121·5 lb.	Net Return representing Value of 209 lb. Maize.	Value of Maize per Bushel.
	£ s. d.	£ s. d.	s. d.
6d. per lb. ..	3 0 9	1 8 0	7 6
5½d. per lb. ..	2 15 8	1 2 11	6 2
5d. per lb. ..	2 10 8	0 17 11	4 10
4½d. per lb. ..	2 5 7	0 12 10	3 1
4d. per lb. ..	2 0 6	0 7 9	2 1

Note.—In calculating the net return, which represents the value of the maize fed, the sum of £1 12s. 9d. (total costs excluding maize) is subtracted from the value of the carcass.

The average price received for baconers for the period under review (1934) was 5d. per lb; therefore the maize fed to bacon pigs in these experiments returned 4s. 10d. per bushel after deducting all the costs incurred in the production of the pigs. The market value of maize during this period did not exceed 3s. per bushel.

Porkers.—Two hundred and fifty-five pounds of food are required to produce a carcass weighing 74·2 lb. This amount is made up as follows:—

	£	s.	d.
115 lb. maize (value to be determined)			
102 lb. pollard, at 6s. 6d. per 100 lb.	0	6	8
30 lb. meat meal, at 10s. per 100 lb. ..	0	2	0
18 lb. lucerne chaff, at 5s. per 100 lb.	0	0	11
Total food costs, excluding maize..	0	9	7
Labour costs (estimated on time employed per pig)	0	5	0
Cost of feeding sow (per pig) ..	0	5	6
Capital value of sow (per pig) ..	0	1	6
Buildings and equipment (per pig)..	0	0	10
Total cost (excluding maize) of producing carcass weighing 74.2 lb.	£1	2	5

Pork Prices.	Value of Carcass Weighing 74·2 lb.	Net Return Representing Value of 115 lb. Maize.	Value of Maize per Bushel.
	£ s. d.	s. d.	s. d.
6½d. per lb. ..	2 0 2	17 9	8 8
6d. per lb. ..	1 17 1	14 8	7 2
5½d. per lb. ..	1 14 0	11 7	5 8
5d. per lb. ..	1 10 11	8 6	4 2
4½d. per lb. ..	1 7 10	5 5	2 8

Note.—In calculating the net return, which represents the value of maize fed, the sum of £1 2s. 5d. (total costs excluding maize) is subtracted from the value of the carcass. The average price received for porkers for the period under review (1934) was 5½d. per lb., therefore the maize fed to porkers in these experiments returned 5s. 8d. per bushel after all costs had been deducted.

Quality of Carcasses.—These experiments have shown that pigs can be economically produced under this system of dry meal feeding. Apart from the financial aspect, however, it is necessary that only the best quality carcasses should be produced for the export trade. Reports received from the Queensland Meat Industry Board and also from Swift and Co., Ltd,. London, have shown that the type of carcass produced in these experiments is highly satisfactory for the export trade to the United Kingdom. In a report received from Swift and Co. regarding one shipment containing carcasses of the following crosses: Tamworth x Large White, Berkshire x Tamworth, Berkshire x Large White, Large White Pure, Middle White-Tamworth x Middle White, the following statement was included:—

"As a whole they were some of the finest developed pigs we have seen; percentage of fat and lean was generally well distributed and not wasteful. Handling throughout was all that could be desired."

All the pigs slaughtered from these tests were graded first export quality.

Disease.

Pigs reared under this system of housing and feeding were comparatively free from disease. A feature of note, however, was the fact that in practically every case the litters suffered a

severe attack of diarrhœa at ages varying from three to five weeks. The cause of these attacks was not definitely determined, but it was probably associated with a mineral deficiency in the sow's milk.

This was substantiated by the fact that dosing the pigs in the litter with a solution containing copper sulphate and sulphate of iron was successful in stopping the trouble.

The heads from a number of pigs slaughtered from the experiments were condemned due to abscess formation in the submaxillary glands. Of the 104 pigs slaughtered 10 heads and 1 carcass were condemned for abscess formation. The lymphatic glands obtained from the condemned heads were examined, and tests for tuberculosis gave negative results. Investigations were carried out in an endeavour to ascertain the cause of the abscess formation, and *B. pyogenes* was identified as the causal organism.

Conclusions.

1. These experiments have demonstrated that meat meal can be economically fed to pigs in a dry form in combination with cereal meals, minerals, greenstuff, and drinking water.
2. That the ration used is appetising, nourishing, and a good substitute for skim milk, buttermilk, or whey.
3. Meat meal fed pigs as produced in these experiments are of a very satisfactory carcass quality, better, possibly than those produced where a maximum of milk is used.
4. During periods of short supply of skim milk, meat meal could be used to supplement the milk to advantage, especially if fed in dry form with the meals used in these experiments.
5. It is therefore claimed, as a result of these feeding tests, that the addition of meat meal to ordinary farm rations, inclusive of a proportion of skim milk, would enable the available milk to be distributed over a larger number of pigs, thus enabling pig production to be increased without increase of dairy stock.
6. The two methods of feeding could be combined during periods when skim milk is available in larger quantities, the pigs being fed on milk and other foods until they are from 13 to 15 weeks of age, after which they could be given a meat meal ration, similar to the one used in these tests, until they are ready for marketing.
7. That the return to the farmer for maize fed in conjunction with meat meal to pork and bacon pigs, is much higher than market values, provided the pigs are:—
   (*a*) Correctly fed from birth to maturity.
   (*b*) Are kept under sanitary conditions.
   (*c*) That market values of pork and bacon pigs bear a similar ration to that which has applied during the above experiments.

Tattooing Experiments.

Tattooing experiments were conducted in conjunction with the pig-feeding experiments, both the body and ear tattoos being used. Many inks and dyes have been tried, but no definite results have been obtained to date.

REPORT OF THE REGISTRAR OF PRIMARY PRODUCERS' CO-OPERATIVE ASSOCIATIONS.

"The Primary Producers' Co-operative Associations Acts, 1923 to 1934."

In accordance with Rule 52 of Part II. of the Schedule to the abovenamed Acts, I have the honour to submit, for transmission to the Governor in Council, my report for the year ended 30th June, 1935.

Since my last report sixteen additional associations have been registered, making a total of 199 associations and 1 federation registered under the Acts.

The registrations for the year under review were:—

The Millmerran Dairy Co-operative Association Limited.
The Coalstoun Lakes Co-operative Dip Association Limited.
The Kooroongarra Co-operative Dairy Association Limited.
The Bowen and Districts Tobacco Growers' Co-operative Association Limited.
The Junction View Co-operative Dip Association Limited.
The Northern Granite Belt Fruit and Vegetable Growers' Co-operative Association Limited.
The Queensland Co-operative Milling Association Limited.
The Vernor Co-operative Cattle Dip Association Limited.
Warwick Farmers' Co-operative Milling Association Limited.
The Wheatlands Farmers' Co-operative Association Limited.
North Queensland Fruit Growers' Co-operative Association Limited.
The Queensland Barley Growers' Co-operative Association Limited.
Beerburrum Tobacco Growers' Co-operative Association Limited.
The Coleyville Co-operative Dip Association Limited.
The Dimbulah Tobacco Growers' Co-operative Association Limited.
The Daintree Co-operative Butter Association Limited.

The associations registered under the Acts to 30th June, 1935, are listed below:—

Bacon Associations.—Having a capital divided into shares with limited liability ..	4
Barley Association.—Having a capital divided into shares with limited liability	1
Canning, Jam, and Preserving Association.—Having a capital divided into shares with limited liability. (Since cancelled)	1
Carrying Association.—Having a capital divided into shares with limited liability	1
Chicken Hatchery Association.—Having a capital divided into shares with limited liability	1
Cold Storage Federation.—Having a capital divided into shares with limited liability	1
Cotton Association.—Having a capital divided into shares with limited liability	1
Dairy, Butter, and Cheese Associations.—Having a capital divided into shares with limited liability	57
Without share capital, with liability limited to the assets of the Association	5
Dip Associations.—Having a capital divided into shares with limited liability	28
Egg Producers' Association.—Without share capital with liability limited to the assets of the Association	1
Farmers' Association.—With capital divided into shares with limited liability ..	1
Farmers' Association.—Without share capital with liability limited to the assets of the Association	1
Farmers' Distributing Association.—Having a capital divided into shares with limited liability	1
Fat Pig Selling Association.—Without share capital with liability limited to the assets of the Association	1
Fruitgrowers' Associations.—	
Having a capital divided into shares with limited liability	7
Without any share capital with liability limited to the assets of the Association	56
Fruit, Vegetable, and Poultry Association.—Having a capital divided into shares with limited liability	1
Fur Farming Association.—Having a capital divided into shares with limited liability	1
Milling Associations.—Having a capital divided into shares with limited liability	2
Packing Associations.—Having a capital divided into shares with limited liability	3
Peanut Growers' Associations.—Having a capital divided into shares with limited liability	2
Producers' Associations.—Having a capital Without share capital with liability limited divided into shares with limited liability	5
Publication Association.—Having a capital divided into shares with limited liability	1
Stock and Produce Associations.—Having a capital divided into shares with limited liability	3
Stores Association.—Having a capital divided into shares with limited liability	1
Sugar Associations.—	
Having a capital divided into shares with limited liability	1
Without share capital with liability limited to the assets of the Association	8
Tobacco Growers' Associations.—	
Having a capital divided into shares with limited liability	2
Without share capital with liability limited to the assets of the Association ..	2
Associations without share capital with unlimited liability	Nil
	200

Since the Acts came into force several associations have amalgamated, the registrations of others have been cancelled, and some have ceased to function and are being wound-up voluntarily, so at present there are actually 192 associations registered under the Acts.

Several associations have amended their rules to meet the changing circumstances, and there are other associations considering the question of amalgamation with a view to securing more economical working and further co-operative efficiency.

Some exemptions have been granted from the provisions of the Acts, and 173 auditors have been licensed thereunder.

JAMES P. ORR,

Registrar of Primary Producers' Co-operative Associations.

REPORT OF THE DIRECTOR OF MARKETING

FOR THE YEAR ENDED 30TH JUNE, 1935.

In accordance with the provisions of "*The Primary Producers' Organisation and Marketing Acts, 1926 to 1932*," I have the honour to submit herewith a report of the operations of the pools that have been constituted in relation to the various commodities under the legislative measures which have been enacted to provide for the organised marketing of primary products in Queensland.

My last report indicated fifteen commodities which had been declared commodities under existing legislation, and this number has now been increased to sixteen by the addition of plywood and veneer produced in that portion of Queensland north of the twenty-third degree of south latitude, which have been declared commodities under the Acts.

ARROWROOT BOARD.

Personnel of the Board to 14th April, 1937.—Messrs. R. Stewart (Chairman), J. F. Cassidy, A. Rose, C. Brumm, G. R. Walker, and E. Graham (Director of Marketing).

As in the previous year, the Board's activities were hampered through the actions of some millers who preferred to remain outside the aegis of the Pool and effect sales at rates which, with further diminution of prices, will not tend to make arrowroot growing a payable proposition. These dissenting millers, however, only represent a small minority, whose sales methods have reacted rather disadvantageously to themselves. During the period under review, the Board and its agents, backed by the co-operation and loyal support of the majority of the millers, have conducted the business of the Pool in a satisfactory manner.

It is worthy of mention that at a conference on the 17th June between the Board and millers, who are parties to the three years' agreement, the latter were unanimous in endorsing the Board's policy and administration, and reaffirmed their decision to co-operate in every respect.

Season 1932:—During the year a fourth advance of 2s. 10½d. per ton of bulbs was paid to growers. The season's operations will be finalised next month, when growers will receive a final advance of 9.68d. per ton on bulbs, which will bring the growers' total payments to £1 11s. 2.18d. per ton on tubers delivered to the Pool. The total payments to millers amount to £13 per ton of flour. The average sale price realised was £33 2s. 5.62d. per ton of flour.

Season 1933:—Advances paid subsequent to 30th June, 1934, were 2s. per ton of bulbs to growers and £1 per ton of flour to millers.

Season 1934:—The quantity of flour manufactured and delivered to the Board amounted to 721 tons 11 cwt. 2 qr. The volume of sales has been satisfactory, resulting in a considerable reduction of stocks, from which further quantities have still to be delivered against contracts.

ATHERTON TABLELAND MAIZE BOARD.

Personnel of the Board to 31st March, 1936.—Messrs. L. R. Crouch (Chairman), J. Gargan, P. G. Martin, L. R. Tostevin, J. F. Quilter, and E. Graham (Director of Marketing).

At the Board election in March two of the former members of the Board, Messrs. W. Bailey and R. Hill, were defeated by Messrs. Gargan and Quilter.

Disposal of Stocks.			Tons.
Carry-over from 1933-34 Pool			2,300
Deliveries from growers (1934-35)			5,294
Gross Total			7,594*
Weight of bags sold as maize			107
			7,701
	Tons.		
Less moisture	99		
Less under-run	94†		193
Total despatches to 30th April, 1935			7,508
Less weight of bags sold as maize			107
Total actual grain despatched			7,401
	Tons.		
Deduct offal	34		
Deduct dead grain	191		225
			7,176†

* Net deliveries and carry-over		7,594	
Less moisture	99		
Less dead grain	191		
Less offal	34	324	
Net Total		7,270	

† Under-run 94 tons.

Deductions from growers for dead grain and offal amounted to 225 tons. Of this amount 136 tons were sold as offal.

There being no contracts entered into with Southern buyers, the Board was dependent upon the Northern market, where sales were maintained to such an extent that stocks were totally depleted by the end of April, necessitating the temporary early opening of 1935-36 season to enable the Board to hold the market. Deliveries of new season's maize to clients were, for the month of May, 975 tons.

Selling Prices.—The average price obtained per ton varied very little from that of the former year, being £7, as against the previous season, £7 2s. 8d.

Payments to Growers.—A first advance was made to the growers on maize delivered to the Pool of £3 10s. per ton. A second advance of 5s. per ton was made on the 14th February, 1935, a third advance of 10s. per ton was made on 16th March, and the final payment of 21s. per ton was made on the 22nd June, 1935, making a total payment to the growers of £5 6s. per ton on first grade maize delivered to the 1934-35 Pool.

The handling charges of the Pool for the year amounted to £1 18s. 5d. per ton.

The Board made harvesting advances available to growers to the extent of £5,000. Arrangements for finance with the E. S. & A. Bank have been of a satisfactory nature, and similar conditions regarding finance to those pertaining to the period under review have been entered into for the forthcoming season.

Upon application being made, the Government consented to defer the redemption on its loan for one year, and also agreed to a reduction in the rate of interest charged on Government loans from 5½ per cent. to 4½ per cent., dating from 1st July, 1935.

1935-36 *Season.*—New season's maize, the quality of which is highly satisfactory, is still being delivered to the Board, but in volume the outlook for the crop is not bright owing to drought conditions early in the year. It is estimated that the harvest will approximate 12,000 tons.

Markets have been buoyant, owing to the demand for sheep feeding, but are easing since the beneficial rains in the Western pastoral areas.

BARLEY BOARD.

Personnel of the Board to 30th September, 1935.—Messrs. E. Fitzgerald (chairman), H. Kessler, and E. Graham (Director of Marketing).

The Board members' term of office expired on the 30th September, 1934, but the only nominations received were those of Messrs. Fitzgerald and Kessler, who were returned unopposed, Mr. Fitzgerald again being appointed chairman.

During the year the Board decided on a change of policy in relation to its administrative methods. For some years it had been the members' objective to govern the industry's affairs and arrange the necessary finance without having to utilise the services of a selling agent. Consequently, with the advent of the 1934-35 season, Messrs. Denhams Pty. Ltd., who had acted in that capacity since 1930-31 season, ceased to function as such. In September, 1934, applications were called for the position of secretary, the successful applicant being Mr. T. H. Ludgate, of Toowoomba, the whole of the industry's operations now being controlled from that centre.

In order to permit of certain barley being manufactured into malt on growers' behalf, the Queensland Barley Growers' Co-operative Association Ltd. was formed in November last. The principal objects of the Association are to acquire premises and plant and to engage in the manufacture of malt. Under its rules the directors are automatically the members of the Barley Board. As the Association, however, has not been provided with any funds, it has not been enabled to function in the manner anticipated.

1933-34 *Season.*—The total deliveries of barley amounted to 94,515·27 bushels, accounted for as follows:—

	Bush.	lbs.	Bush.	lbs.
Barley received into Pool			94,515	27
Barley malted	38,472	0		
Barley sold	54,416	36		
			93,158	36
Loss in handling			1,356	41

The barley malted, 38,472 bushels, produced 40,071·2 bushels of malt, which represents a gain by conversion of barley to malt of 1,329·04 bushels, or 3·4 per cent.

Growers have received to date by way of advances £9,379 17s. 6d. A balance of £2,220 11s. 8d. now at credit in the Working Account will be available shortly for final distribution. Advances paid to date amount to 2s. 6d., less dockages, on Chevalier, and 1s. 6d. on Cape malting and feed barley.

1934-35 *Season.*—Deliveries to the Board for the season totalled 113,803 bushels, comprised of 94,012 bushels of Chevalier, 11,201 bushels Cape, and 8,590 bushels of feed barley.

Two advance payments have been made to growers to date. The first advance on Chevalier varied from 2s. to 1s. 6½d. per bushel, according to dockages, while 1s. 3d., less dockages, was paid on Cape malting and 1s. on feed. The second advance was at the rate of 6d. per bushel on all classes and grades. The amounts distributed under these two headings were £9,697 12s. 9d. and £2,845 1s. 5d. respectively.

Negotiations were satisfactorily concluded for the sale, at an advance on last year's prices, of over 57,000 bushels of malt and 40,000 bushels of malting barley to certain brewing and malting interests, among whom are included three new clients compared with those of previous years.

In the matter of hail insurance the Board was fortunate during the 1934-35 crop growth, only two claims being received. On the assessment of 269 bushels a first advance of £14 18s. 9d. has been paid to date by way of compensation.

The hail insurance regulations were amended during the year to overcome some of the conditions which applied up to that time, but had proved somewhat unsatisfactory in practice.

Overtures to the State Wheat Board for an extension of the present lease of "The Maltings" until the termination of the Barley Pool in 1937 were successfully brought to a conclusion. The Barley Board is giving consideration to the purchase of these premises, but negotiations with the owners are still in the preliminary stages.

BROOM MILLET BOARD.

Personnel of the Board to 31st October, 1935.—Messrs. H. Niemeyer (Chairman), H. J. Scholl, and E. Graham (Director of Marketing).

The Board members' term of office expired on 31st October, 1934, but on calling for nominations for a further three years' term, Messrs. Niemeyer and Scholl were returned unopposed, Mr. Niemeyer being appointed Chairman.

1933-34 *Season.*—During the early part of the season, owing to the small quantities of Broom Millet coming to hand, the Board decided not to exercise full control, but it was necessary for growers to send their millet to one of the Board's agents (State Produce Agency Pty. Ltd., Brisbane, or Denham Bros. Ltd., Rockhampton), who disposed of same and remitted proceeds direct to growers. Dur-

ing this period, 31 tons 19 cwt. 0 qr. 15 lb. of broom millet were disposed of, and realised £1,028 3s. 10d., or an average of £32 3s. per ton.

As stated in last year's report, the Board was compelled to exercise full control on the 9th February, 1934, owing to large quantities commencing to come on to the market. The season's operations closed on the 31st October, 1934.

The following are the complete particulars regarding Broom Millet received during the period of full control:—

Grade.	Quantity Received.				Amount Realised.		
	Tons.	cwt.	qr.	lbs.	£	s.	d.
A.	5	2	1	3	174	11	1
B.	12	14	2	27	412	14	11
C.	73	8	2	10	1,918	10	4
D.	57	17	1	10	1,326	16	1
Totals.. ..	149	2	3	22	3,832	12	5

Advances paid to growers were as follows:—

Grade.	£	s.	d.
A	30	3	4
B	28	13	4
C	22	11	8
D	19	16	8

In addition to the above, a quantity of 14 tons 10 cwt. 2 qr. 6 lb., which realised £211 1s., was received during the period of full control, but owing to its being of inferior quality, and not coming up to the standard of "D" grade, was sold ex the Pool, and proceeds remitted direct to growers when sales were made.

1934-35 *Season.*—This season commenced on 1st November, 1934. Returns were called for from growers, and from the information contained therein, it was realised that the crop was only going to be a small one, consequently the Board again decided not to exercise full control, but instructed the agents to dispose of millet as it was received and remit proceeds direct to growers. During the period, 1st November, 1934, to 30th June, 1935, 44 tons 0 cwt. 3 qr. 6 lb. of millet were received and sold, which realised £1,402 1s. 8d.

Unfortunately, there was a large quantity of broom millet held over from the previous season in the Southern States, and in consequence of this, the Board was unable to improve the price of millet, although there was only a small crop produced in Queensland.

BUTTER BOARD.

The term of the Board has been renewed twice, as follows:—1st July, 1934, to 7th February, 1935; 8th February, 1935, to 30th June, 1935. These extensions involved in each case the reappointment of the existing Board, comprising Messrs. J. Purcell (chairman), E. Graham (Director of Marketing), R. M. Hill, A. G. Müller, M.L.A., J. McRobert, T. F. Plunkett, M.L.A., and W. J. Sloan. Notice of intention to extend the Board for a further three months was given during the present month.

Production.—Particulars of the manufacture, sales, and consignments of butter for the year ended 30th June, 1935, are set out in Appendix 1. The figures for the preceding nine years are, for purposes of comparison, set out under Appendix 2.

It will be noted that during the year under review the total manufacture was 2,325,402 boxes, an increase over that of the previous year of 112,695 boxes. This production constitutes a record for the State.

Consumption.—The figures given under the heading "Sales in Queensland," Appendices 1 and 2, relate only to butter of Queensland manufacture, and do not therefore indicate the true position in so far as concerns butter consumption in this State. Consumption of butter in Queensland since the Board commenced operations is as follows:—

Year.	Consumption (boxes), inclusive of imports from other States.
1925-26	401,806
1926-27	407,698
1927-28	409,452
1928-29	410,879
1929-30	421,009
1930-31	414,244
1931-32	422,234
1932-33	449,520
1933-34	450,162
1934-35	473,067

The 1934-35 figures comprised 463,567 boxes of Queensland manufacture and 9,500 imported from other States. On this basis the per capita consumption in Queensland for the year in question is equivalent to 27·65 lb. per annum. It is questionable if any other tropical or sub-tropical country approaches this figure.

Interstate Trade.—By reason of the operation of the Commonwealth Dairy Produce Equalisation Committee Limited no trouble was experienced during the year in the matter of imports of butter from other States. As indicated above, only a small quantity of butter enters Queensland via the border for consumption in centres adjacent to the border. It can be said that this trade, in this case, is following its natural course, and the arrangement is a sound and economical one to dairy farmers generally.

Commonwealth Equalisation of Prices.—During the year the Board has co-operated to the fullest extent with the Commonwealth Dairy Produce Equalisation Committee Limited, and it is pleasing to state that the record of the company's operations from May, 1934, to June, 1935, indicates fully that the company has fulfilled the expectations of those who were responsible for its inauguration and, in addition, the standpoint of factories generally throughout the Commonwealth.

The benefits Queensland dairy farmers have received on the quantity of butter sold by them throughout the year on the basis of parity values, as compared with the actual prices factories have received under the Commonwealth Equalisation Plan, are indicated in Appendix 3. From this it will be seen that Queensland dairy farmers received £1,294,716 8s. 8d. more than would have been obtained had no organised system of marketing been in operation.

The table set out in Appendix 4 reveals, for purposes of comparison, the yearly returns to factories from the year ended 30th June, 1930, up to and including the date of this report. These values represent the average net prices

returned to factories, and exclude only selling commission and manufacturing costs.

It will be seen from this table that, despite the lower prices and greatly increased exports of the last two years, a price collapse has been averted because of the Commonwealth equalisation system now operating.

Finance.—The main functions of the Board during the year comprised the finalising of certain equalisations and consideration of proposals aiming at improving local marketing conditions.

No actual administrative levy was struck during the year, the only levies applied being those found necessary to meet the precepts of the Department of Agriculture (Dairy Cattle Improvement Act) and the Council of Agriculture. During the year reserves were depleted to the extent of £7,608 13s. 3d., this representing the sum of money rebated to factories throughout the State in accordance with the output of each over a long period of years.

The future financing of the Board will depend largely on developments in connection with the local marketing proposals referred to, but which have not yet taken practical shape.

CANARY SEED BOARD.

Personnel of the Board to 31st May, 1936.—Messrs. G. Burton (Chairman), G. D. O'Neill and E. Graham (Director of Marketing).

The same growers' representatives were returned unopposed as Board members for the twelve months dating from 1st June, 1935.

1933-34 *Season.*—The Board's intake amounted to 2,171 tons 10 cwt. 3 qr. 21 lb. of uncleaned seed accounted for as follows:—

Seed Treated.	Weight.				Realisations.		
	Tons.	cwt.	qr.	lbs.	£	s.	d.
Cleaned seed ..	1,744	3	0	11	47,457	19	3
Gradings and broken seed	394	17	3	14	1,790	13	3
Loss in cleaning ..	32	9	3	24	..		
Totals ..	2,171	10	3	21	49,248	12	6

Growers were returned £19 11s. 5d. net per ton of cleaned seed, £6 net per ton of broken seed, and £2 10s. net per ton on saleable gradings. Hail insurance compensation was paid on 152 tons 17 cwt. 3 qr. 17 lb. at £14 6s. 5d. net per ton.

The 1933-34 season was the worst in the Board's experience in respect to foreign matter, shelled and broken seed contained in growers' consignments. This amounted to approximately 20 per cent. of the intake, and, although attributable in part to excessive wet weather conditions and the resultant abnormal weed growth, the principal cause is traceable to faulty cultural and harvesting methods. The Board has, from time to time, drawn the attention of its suppliers to these factors, and pointed out how these difficulties can be overcome, thus enabling the Pool to reduce its cleaning expenditure and ensure a higher return to growers. Although put to considerable labour and expense in this regard during the season in question, the Board was nevertheless able to maintain its usual high standard quality for seed sold, so much so that when certain complaints were given publicity as to the quality of canary seed supplied by the Pool, the fact was easily established that these statements could not refer to supplies emanating from this particular source.

1934-35 *Season.*—The receivals from growers to date amount to 1,280 tons 13 cwt. of uncleaned seed, of which 739 tons 3 qr. 21 lb. of cleaned seed and 140 tons 3 cwt. 14 lb. of gradings have been disposed of. On all approved lines growers have received two advance payments amounting to £15 per ton (intake weights), and £9 15s. per ton on account of hail compensation. Very little hail damage was experienced during the season; only eleven claims, assessed at 20 tons 14 cwt. 0 qr. 15 lb., being received.

Owing to outside competition and importations, the return to 1933-34 season's growers was less than the maximum sale price allowed by the Tariff Board for Australian seed. There was a similar tendency to lower prices with the advent of 1934-35 season, which caused the Board to investigate the position. From the information so obtained this downward trend was arrested, with the result that the Board anticipates a higher return to growers than for the previous season. In the early stages of the investigation it was ascertained that the South Australian crop would reach some hundreds of tons, and in order that the market would be stabilised, a mutual arrangement as to price was arrived at with the South Australian Canary Seed Growers' Association. During the course of the enquiries the Board ascertained that Southern interests were endeavouring to import canary seed at concessional rates of duty on the plea that the 1934-35 Queensland crop was not sufficient for Australian requirements. This statement was not correct, no consideration having been given by the parties concerned to the fact that other States are now able to produce considerable quantities, and there were, therefore, ample supplies available in the Commonwealth. It was also stated that the Board was quoting above the Tariff Board's conditional maximum selling price, but the Canary Seed Board was able to satisfy the Customs authorities that all of these allegations were without foundation, and the assurance was obtained that there would be no alteration in the rate of duty.

In order to meet an increasing consumption, growers have been advised that for the coming season at least a 33 1-3 per cent. increase on 1933-34 season's production is very desirable. There has not to date been an excessive yield of canary seed in Queensland, and a carry-over of a few hundred tons would be preferable in order that the tariff protection may be retained.

CHEESE BOARD.

Personnel of the Board to 30th June, 1935.—Messrs. H. T. Anderson (Chairman), A. J. Harvey, D. G. O'Shea, A. Pearce, T. Dare and E. Graham (Director of Marketing).

The Board's term expired by effluxion of time on 31st July, 1934, but was extended without opposition for two subsequent periods, the first ending on the 7th February, 1935, and the second on the 30th June, 1935. On each occasion all of the former Board members were re-appointed. Notice of intention was given this month to extend the Board for a further three months as from the 1st July.

Pool Expenses.—The total expenditure incurred in connection with the Board's operations during the year amounted to £1,581 16s. 11d., which is equivalent to 3.07d. per one hundred pounds of cheese sold, as compared with 3.48d. for the previous year, and 3.09d. for the 1932-33 period.

Production.—The quantities of cheese produced during the year 1934-35 were as follows:—

	Lb.
Cheddar	12,071,788
Gruyere	46,599
Roman and Edam	59,154
Total	12,177,541

In comparison with the production in 1933-34 (13,842,219 lb.) and 1932-33 (13,003,865 lb.) the quantity for the year under review is considerably below the average for the three years in question, but this can be attributed almost entirely to the dry spell experienced in April, May and June of the current year, as up to that point production compared favourably with 1932-33 and 1933-34. Another contributing factor is the closure of three Northern factories during the year.

The Standard Dairy Co. Ltd. ceased in October last to manufacture Roman and Edam cheese at Wellcamp, and this accounts to some extent for the noticeable decrease in the quantity of fancy varieties manufactured as compared with 363,096 lb. for 1933-34 period.

Disposals.—The Commonwealth Dairy Produce Equalisation Plan came into operation for cheese as from 1st July, 1934, and as the new method of equalisation differs slightly from that previously applied by the Cheese Board, it is not possible to give the same dissection of the markets on which sales were effected as in previous years, for the reason that all sales are now grouped under two markets, viz., Australian and overseas.

For comparative purposes the disposals of Queensland cheese on the Australian and overseas markets during the past three years were:—

Market.	1932-33.		1933-34.		1934-35.	
	Lb.	%	Lb.	%	Lb.	%
Australian	5,517,520	45·8	5,879,598	46·6	4,467,402	36·2
Overseas	6,538,569	54·2	6,725,085	53·4	7,879,389	63·8
Totals	12,056,089	100·0	12,604,683	100·0	12,346,791	100·0

Values.—Owing to the different methods of equalisation in operation in the past two years, it is difficult to accurately compare average values, as during the past twelve months the extra price realised for the smaller sizes of cheese has not been taken into equalisation, and consequently the average equalisation price, which worked out at 6.275d. per lb., would be rather lower than the actual figure.

Commonwealth Equalisations.—After twelve months working under the Commonwealth Equalisation Plan, it can be said that the results fully justify the high hopes held out for the success of the project by those who so strongly advocated its inauguration, and whilst perhaps the benefits, so far as Queensland is concerned, have not been so pronounced for cheese as is the case of butter, nevertheless, the Board is strongly of the opinion that the plan prevented a collapse of cheese values on the Australian market during the past year, as the increased production in the Southern States would have militated against Queensland's chances of effecting profitable sales to New South Wales and Western Australia, as had been done in prior years.

In considering the average equalisation value for the past year attention must be again drawn to the fact that the extra price realised for loaf and picnic sizes over and above the medium rates has not been taken into consideration, whilst, in addition, the export costs allowed for in the Commonwealth equalisations covered the cost of cases, and for this reason were higher than the allowances previously made by the Cheese Board for export costs. Taking these factors into consideration, it is safe to say that the net values for the year just closed compared favourably with those of the previous year.

Export Gradings.—Set out hereunder are Commonwealth grading figures for the years 1933-34 and 1934-35:—

1933-34.			1934-35.		
Grade.	Crates.	%	Grade.	Crates.	%
Choicest	792	1·56	Choicest	338	0·65
Firsts	12,774	25·15	Firsts	12,927	24·79
Seconds	27,335	53·82	Seconds	32,736	62·78
Thirds	8,978	17·68	Thirds	5,379	10·32
Rejects	912	1·79	Rejects	760	1·46
Totals	50,791	100·00	Totals	52,140	100·00

It is a matter for regret that the export grading figures reflect no improvement in quality, but the Board believes that practically all cheese manufacturers are fully aware of the necessity for improving the quality of their product, and that they are doing their utmost under adverse weather conditions to bring about a general uplift. It is anticipated that definite progress in the matter of improvement in quality will be made during the coming year.

Overseas Shipments and Realisations.—Of the cheese graded by the Commonwealth graders, as set out above, 50,312 crates were exported to the United Kingdom, as compared with 43,058 crates for the previous year and 42,064 for 1932-33. Monthly shipments were made to the United Kingdom during the year, and realisations were disappointing, although the market did not fluctuate to the same extent as in previous years. Whereas in 1933-34 prices ranged from 42s. 10d. per cwt. to 53s. 0d. per cwt., the range of prices for the year under review was from 41s. 11d. per cwt. to 47s. 9d. per cwt.

COTTON BOARD.

Personnel of the Board to 31st December, 1935.—Messrs. D. C. Pryce (Chairman), J. Beck, H. R. Brake, J. P. Fleming, E. J. Basson, F. A. Kajewski, and E. Graham (Director of Marketing).

1933-34 *Season.*—Particulars with regard to acreage and production for the 1933-34 cotton season ending 30th November, 1934, are as follows:—

Number of growers	3,764
Acreage	60,000
Quantity of seed cotton produced ..	26,861,635 lb.
Quantity of raw cotton (cotton lint) produced	8,769,510 lb.
Number of bales raw cotton ..	17,471
Cotton seed used for planting ..	1,141,575 lb.
Cotton seed transferred to oil mill	17,004,671 lb.

The season, taken on the whole, was a good one, the yield per acre being approximately equal to the average over a period of twelve years. The unfavourable weather factors were an excess of rain during the spring and early summer, and a dry, hot spell during practically the whole of January. The excessive rainfall prevented the burning of about 8,000 acres of virgin scrub which had been felled during the winter in preparation for planting to cotton, and the effective cotton acreage was thus greatly reduced. The dry period in January seriously affected the setting of squares and bolls, and considerable shedding occurred, which materially reduced the yield of cotton. In spite of the prevailing unfavourable weather conditions, the yield was easily a record for the State, being 5,514 bales of raw cotton greater than the previous highest yield produced in 1925.

Marketing Arrangements.—With this record production, and the uncertain demand in 1934 for cotton from Australian spinners, it was found necessary to export 30 per cent. of the crop. The disposal of the crop is shown hereunder:—

	Bales.
Sold for use within Australia	12,242
Exported to Liverpool	3,430
Exported to Japan	1,799
	17,471

The export of such a large proportion of the crop reduced somewhat the return to growers, and the average net payment made to growers for the season was 3.3d. per pound of seed cotton, the payment for the top grade being 3.63d. per pound.

By-products.—Particulars of the cotton seed treated in the oil mill for the season, and the by-products obtained therefrom, are set out hereunder:—

Seed treated .. .. .. 17,243,707 lb.

PRODUCTS MANUFACTURED.

	Lb.
Cake	7,238,105
Meal	795,450
Meal, No. 2	764,600
Bran	494,200
Linters	424,368
Crude oil	2,373,500
Refined oil	*1,772,286
Soap-making oil	*523,435
Deodorised oil	*809,691
Acid oil	*53,017
Pig food	9,600
Motes	1,764

* From the crude oil.

During the season 7,534,350 lb. of cotton-seed cake and meal were disposed of. Of this quantity 6,048,000 lb. were sold overseas, the export markets being London, Liverpool, Avonmouth and Hull.

1934-35 *Season.*—The present season started with very favourable weather conditions, and the condition of cotton crops at the end of 1934 was excellent. The acreage planted was approximately the same as for the previous season. From the beginning of 1935 dry, hot weather was experienced, and a long spell of this weather, which was particularly adverse in February, very materially reduced the yield of cotton for the season. Up to the 30th June, 1935, 13,324 bales of raw cotton had been ginned.

EGG BOARD.

Personnel of the Board to 31st December, 1935.—Messrs. R. B. Corbett (chairman), M. H. Campbell, C. Gisler, J. de Vries, W. T. Hughes, and E. Graham (Director of Marketing).

Just prior to the election Mr. A. A. Cousner, a former member, died, but owing to the close proximity of the pending Board election, it was decided not to fill the vacancy for the unexpired portion of the term. At the Board election Messrs. T. Hallick and A. McLauchlan were defeated by Messrs. Gisler and de Vries.

During the year under review the quantity of eggs handled by the Board and its agents was 23 per cent. greater than for the previous twelve months, indicating a considerable expansion of the industry within the area under the purview of the Board.

Sales within the State surpassed those of the period 1933-34, but the surplus for which markets had to be found elsewhere was greater than ever. There was an increase of 126 per cent. in the quantity sold in Southern markets, and the 64,827 cases (30 dozen each) of eggs exported to the United Kingdom represent a 33 per cent. increase over the shipments of the previous export season.

Very favourable reports were received by the Board relative to the quality of the eggs sent overseas, and high appreciation of the method of packing and general get-up was expressed by the Board's London agents and others in a position to form an opinion. The Board used a new type of packing in the 15 and 16 lb. packs. Damage to eggs transported in these "filler-flats" was negligible, and the trade found them most useful and effective for window displays.

When Australian eggs were on the British markets last season prices were practically on a par with those of the previous year until a combination of adverse circumstances resulted in a serious prices slump towards the end of the season. The contributing factors were a particularly mild winter season in Great Britain, a cessation of buying by Germany from contiguous countries, and the diversion of eggs from these countries to British markets, together with the arrival from Victoria of several consignments of eggs of inferior quality. The latter regrettable occurrence immediately had its reflex in lower prices for Australian eggs generally. Unfortunately, the overseas export operations of the Board for 1934-35 season resulted in a deficit of £4,700.

A report has been received from London concerning a shipment of 900 tins of egg pulp shipped in June last, and it is described as of "good quality" and as having arrived in "excellent condition."

The probability of the British authorities restricting the importation of eggs in shell from Australia has caused the Board considerable anxiety, and, in conjunction with the Egg Producers' Council, it has taken steps to make such representations as may be deemed necessary at the opportune moment. It will be obvious, in view of the recent expansion of egg production in Queensland, that a serious position would arise were restrictions or quotas imposed.

In October last, a proposal for the erection of suitable premises for the conduct of the Board's business was referred to the growers. The ballot favoured the proposal by a large majority. The Board has acquired a building site at the corner of Makerston street and River road, North Quay, and the erection of premises will proceed at an early date.

The average net prices returned to growers for the year ended 30th June, 1935, was one-halfpenny less than for the previous year, but in consideration of the hugh increase in supplies and greater marketing difficulties, it may be fairly claimed that the operations of the Board on behalf of producers have been satisfactory.

A summary of the major marketing operations of the Board is set out below:—

JULY, 1934–JUNE, 1935.

—	Dozen.	Increase on 1933-34.
		Per cent.
Quantity of eggs received at packing floors of the Board	3,493,314	23
Quantity of eggs received by Board's authorised Agents	1,636,376	24
Surplus stocks transferred by Agents to Board's floor	884,102	44
Eggs cold stored	213,690	25
Eggs converted into pulp (= 107,549 lb.)	114,092	52
Eggs exported overseas ..	1,944,810	33
Eggs sent to Southern Markets	647,640	126

THE FRUIT INDUSTRY.

INTERSTATE TRANSPORT.

The following number of packages of fruit and vegetables have been forwarded by the Committee of Direction of Fruit Marketing fruit train specials and by steamer to the Southern markets for the period twelve months ended 30th June, 1935:—

SUMMARY OF INTERSTATE TRANSPORT.

To—	By C.O.D. Fruit Train Specials.	By Steamer.	Total.
Victoria	563,517	3,301	566,818
New South Wales	645,406	24,093	669,499
Totals	1,208,923	27,394	1,236,317

QUANTITIES OF BANANAS AND PINEAPPLES HANDLED BY THE COMMITTEE OF DIRECTION OF FRUIT MARKETING FOR TWELVE MONTHS ENDED 30TH JUNE, 1935.

Bananas.

Southern Consignments to—	Cases.
Melbourne	370,259
Sydney	34,880
Other Southern Centres	4,169
Interstate total	409,308
Brisbane Market	96,880
	506,188
Railings outside C.O.D.—The Queensland production must be increased by the production of the district from Nerang to the Border, which is mostly railed interstate via Murwillumbah, and of which the C.O.D. has no specific record, viz.	75,000 approx.
Total	581,188

Bunch Bananas.

	Bunches.
Total quantity marketed in Brisbane	587,461
Of which the C.O.D. handled ..	81,860 = 13·9 per cent

The average price realised by the C.O.D. during the above period for bunch bananas was 2.5d., the average quantity per bunch being $7\frac{7}{12}$ dozen. The average price realised for cased bananas was 6s. 6½d.

The approximate value of Brisbane consignments on the above averages:

	£
Bunches	46,700
Cases	32,600
	£79,300

(Equivalent 587,461 bunches in cases = 148,497).

Pineapples.

Southern Consignments to—	Cases.	Cases.
Melbourne	120,369	
Sydney	150,416	
Other Southern Centres	6,632	
Interstate total		277,417
Queensland sales (approx.)		192,942
Factory Consignments—		
Winter, 1934	157,425	
Summer, 1935	235,448	
		392,873
Grand total		863,232

FACTORY ACTIVITIES FOR TWELVE MONTHS ENDED 30TH JUNE, 1935.

STANTHORPE FRUITS.

Season: December to May—

	Direct. Tons.	Ex Market. Tons.	Tons.
Apples	137	..	
Peaches	..	1	
Plums	212	33	
Apricots	1	7	
Quinces	10	..	
Tomatoes	45	..	
	405	41	446

CITRUS FRUITS.

Season: April to October—

	Tons.	
Citrons	19	
Sevilles	92	
Lisbon Lemons	183	
Bush Lemons	1	
Sweet Oranges	39	
		334

FIGS.

Season: January to April	94

PAPAWS.

Season: August to February—

Direct to factory	141	
Ex markets	126	
		267

PASSION FRUIT.

Season: December to February	53

STRAWBERRIES.

Season: July to December	82

TOMATOES.

Metropolitan Crop: June to December	279

PINEAPPLES.

	Direct. Cases.	Ex Markets. Cases.	
Winter Crop, 1934	157,425	7,222	
Summer Crop, 1935	235,448	5,753	
	392,873	12,975	
	405,848	(approx)	10,969
Total Tonnage			12,524

DIRECTIONS AND LEVIES.

Directions.

The following fruits have been under the control of the Committee of Direction for the year ended 30th June, 1935, by direction:—

Citrus fruits
Deciduous fruits
Figs
Passion fruit } for factory

Papaws—

(*a*) For factory.

(*b*) For the purpose of prohibiting the sale of green papaws on the Brisbane market, and to stabilise the market by prohibiting the sale of blemished papaws when the price of unblemished falls to 3s. per case.

Pineapples
Strawberries } for factory

Tomatoes—

(*a*) For factory.

(*b*) To stabilise the Brisbane market for Stanthorpe grown tomatoes by prohibiting the sale of "B" grade tomatoes and small "A" grade tomatoes from such district when the price of "A" grade will not realise a higher gross amount than 4s. 6d. per half-bushel case on the market.

Plums—

To stabilise plum marketing by raising the minimum grade standard of the various varieties ½-inch during periods of heavy supply when the general market price of plums on the Brisbane market would not realise a higher gross amount than 3s. 6d. per half-bushel case.

(There was no need at any time to enforce this Direction.)

Levies.

The following levies have been in operation during the year ended 30th June, 1935:—

Banana levy—1d. for every £2 or part thereof of the net proceeds realised from sales in Queensland.

Citrus levy—1d. per bushel case for expenditure in the interests of the Citrus Section.

Pineapple levy—½d. per case on pineapples marketed as fresh fruit and 1d. per case on factory pineapples—to meet the expenses of the Pineapple Section and the administration of the cannery crop.

Papaw levy—1d. for every four cases or part thereof; utilised for the advertising of papaws.

Stanthorpe levy—1s. 8d. per ton on the quantity of fruit and vegetables marketed from the Stanthorpe district, for distribution in the form of Hail Relief.

REFUNDS MADE TO GROWERS UNDER VARIOUS SYSTEMS OF FINANCE DURING THE TWELVE MONTHS ENDED 30TH JUNE, 1935.

Banana Revolving Fund.

Payments were completed in December, 1933, to all growers of bananas who consigned to the Southern States during the year 1929, the refund being at the rate of 1½d. per case on bananas forwarded by the Committee of Direction of Fruit Marketing fruit train specials during 1929. The amount involved was £3,645 9s. 1d.

The total amount returned per medium of this fund to Southern consignors of bananas for the years 1924 to 1929, inclusive, is £21,633 17s.

Pineapple Southern Consignors' Revolving Fund.

In December, 1934, an amount of £584 4s. 11d. was returned to pineapple growers who had forwarded consignments of pineapples to the

Southern States by the Committee of Direction of Fruit Marketing fruit train specials during the year 1927. Payment was at the rate of 1d. per case.

Further payments were made in May, 1935, to the Southern consignors of pineapples during the years 1928 and 1929, the amount represented by these payments being £1,345 9s. 10d.

The total amount disbursed from this fund to Southern consignors of pineapples for the years 1924 to 1929, both inclusive, is £3,454 16s. 3d.

Pineapple Cannery Suppliers' Revolving Fund.

Amounts withheld from the winter crop of 1933 and the summer crop of 1934 have been returned to growers with payments for the corresponding crops of the following year. The total amount that has been returned is:—

	£	s.	d.
Winter crop	3,539	18	0
Summer crop	3,777	12	9
Total ..	£7,317	10	9

Hail Relief Fund.

Owing to severe hail storms in the Stanthorpe area very heavy claims were made on the fund established by the collection of 1s. 8d. per ton on all fruit and vegetables marketed from that district.

The ratio payment resulted in growers receiving only one-ninth of the assessed damage. The amount returned to growers in June, 1935, from this fund was £2,370.

The need for more effective protection against hail damage is apparent, and the district is now considering various schemes.

Pineapple Export Reserve Fund.

This fund was established by growers contributing 6d. per case to meet any loss that might be involved on the export of canned pineapples from the Summer and Winter packs of 1934 in excess of the grant of £20,000 from the Fruit Industry Sugar Concession Committee. Sales overseas were better than anticipated and the whole of this Reserve Fund was returned to growers in December, 1934, amounting to £7,694 13s. 11d.

POLICY MATTERS.

Banana Section.

General.—The banana industry throughout the year under review was faced with an acute marketing problem through the very heavy production in Queensland and increased acres planted in New South Wales. When this increased production was first reflected by the collapse of the interstate markets early in October, 1934, the Queensland growers, in an endeavour to lessen the quantity marketed and thereby improve prices, agitated for an increase in the length standard of the smallest grade, "Sixes," from 5½ inches to 6 inches. Effect was eventually given to this recommendation by the Departments of Agriculture of Queensland and New South Wales, and this assisted market values somewhat. As illustrative of the heavy quantities available, it is on record that for the week ending 17th October, 47,400 cases of Australian-grown bananas were marketed in the various States of Australia. This constitutes a record for any one week.

The ripening rooms of modern design erected by the Committee of Direction in Brisbane, Sydney, and Melbourne have played an important part in this problem of overproduction, and the claim that they have been responsible for an increase in the consumption of bananas, by reason of the better article offered the public, can be substantiated by the operations in Brisbane alone. It is further claimed that but for the abnormal supplies, these rooms would have had a more marked effect on the prices returned to growers. This period of heavy supplies, with the grower frequently receiving less than the cost of production, more than ever demonstrated the need for Commonwealth-wide control of the industry. A conference of banana-growers was convened by the Commonwealth Government at Grafton in January of this year, when the marketing problem was discussed, and the necessity for complete control was stressed.

Committee of Direction Ripening Rooms.—Since the commencement of these rooms, there has been a steady development of the trade, shown by the fact that whereas in 1930 practically no cased bananas were available on the Brisbane market, for the period under review nearly 100,000 cases were marketed in Brisbane, which in turn was an increase of 56,000 cases over the quantity marketed during the previous twelve months. The diversion of these supplies to the Queensland market has naturally been a factor in helping the interstate markets. There has been a big increase in the consumption in Queensland as shown by the following figures for the calendar years:—

1932.	1933.	1934.
184,713	219,316	340,000 cases.

In Sydney, the Committee of Direction plant has been working to capacity, although only light supplies of Queensland bananas are offered on the Sydney market which is adequately supplied with New South Wales fruit.

The opening of the Committee of Direction ripening rooms in Melbourne in October last—the plant comprising thirty-five rooms with a weekly capacity of 5,000 cases—marked the culmination of years of ceaseless endeavour to establish such rooms on the most important market for the Queensland product. The venture is still, more or less, in the initial stages, but it is believed that ultimately the plant will work to capacity, ripening supplies for agents. In addition to banana ripening, it has been used by the trade for the storage and the ripening of other fruits and vegetables, particularly pears and tomatoes. The plant is thus demonstrating its general utility and during the summer months, it had the effect of steadying banana prices in Victoria by enabling fruit to be held over.

Pineapple Section.

Production.—Late in 1934 a second census was taken by the Committee of Direction of the pineapple industry, and this disclosed a 10 per cent. increase for 1935 on the 1934 acreage, and a somewhat higher increase for 1936 is anticipated.

The production for the year under review showed an increase of 23,000 cases on the previous year, which quantity was more than accounted for by increased supplies taken by factories.

Cannery Operations.—The summer crop of 1935 was the heaviest yet handled. Due to exceptionally hot weather conditions a large quantity of the fruit ripened prematurely, with the result that extraordinarily heavy quantities were available for canning within a limited period, and for the fortnight of the peak period some 21,500 cases more were handled than during the heaviest fortnight of any previous season.

Cannery Position.—Very satisfactory sales of canned pineapples both overseas in Canada and the United Kingdom, and in Australia, were made late last year. As a result of lessened supplies of other canned fruits, the Australian position has been satisfactory and the summer pack of 1935 commenced with all canners bare of stocks and heavy orders on hand.

The grant of £20,000 made by the Fruit Industry Sugar Concession Committee to meet any loss on the export of canned pineapples for 1934 proved more than sufficient, and the industry was not perturbed when the amount was reduced to £16,000 for 1935. The aim of the Committee has been to reduce canning costs, improve the quality of the canned article, and raise export prices, so that production may be on a sound economic basis free from dependence on grants.

The Canadian market has been disappointing. Early in the year, anticipating the Canadian Government allowing the free entry of Australian pineapples, the Canadian prices of most lines were advanced. Unfortunately, free entry has not been granted, and due to sales resistance it was found necessary later in the year to restore the price to the old level.

New Zealand Market.—The New Zealand market has afforded a valuable outlet to the pineapple industry, but it is felt that marketing conditions could be greatly improved if the New Zealand authorities insisted upon shipments direct from growers rather than permitting fruit to be purchased on the Sydney and Melbourne markets for shipment to New Zealand. The latter fruit is not specially picked and packed for long distance transport, as is the case with direct consignments, and under the circumstances cannot be expected to enhance the reputation of Queensland pineapples.

Advertising material issued by the Committee of Direction, especially the pineapple posters, has proved of assistance in stimulating sales on the New Zealand market.

Deciduous Section.

Production.—The production of the Stanthorpe district was slightly less than that of the previous season, the total tonnage carried by the Committee of Direction fruit trains to the Brisbane market being 11,565 tons, compared with 12,639 tons the previous season, and a total tonnage of 17,786 as against 20,470 for the previous year. This was due to severe hail storms experienced at the commencement of the season, as there was every indication of a particularly heavy crop of all varieties of deciduous fruits.

In anticipation of heavy supplies being available, advance marketing schemes had been prepared and the district had under consideration relegating full control to the Committee of Direction for the following fruits in the manner indicated:—

Apples—(*a*) For export arrangements, (*b*) for private sale arrangements.

Plums, peaches, grapes, pears, apricots—For private sale arrangements.

Apples.—A conference of apple growers prior to the commencement of the season agreed that the arrangements for export that obtained the previous season should again operate. The conference also gave the Committee of Direction complete control of export arrangements. Previous experience had demonstrated the necessity for a controlling body to negotiate with the various exporters, thereby ensuring a uniform price for the different varieties and grades. Minimum prices were fixed for f.o.b. sales, and buyers in place of their former practice of individual barter with growers approached the Committee of Direction with their orders who arranged the supply to such buyers at the agreed upon prices. The severe hail storms experienced at the commencement of the season reduced the estimated quantity available for export to negligible proportions and it was not considered necessary to impose the equalization levy, there being sufficient in the fund from the previous season to cover any export shipments made on a consignment basis. A total of 7,620 cases was exported, the sale of more than half of which was arranged by the Committee of Direction at the agreed upon price. This price was a good one, and the arrangement was considered eminently satisfactory by all concerned. Growers were saved the trouble and inconvenience of buyers canvassing the district with varying offers, and buyers were saved the expense and trouble of travelling the district.

Through the operations of orderly marketing the apple export has developed from a risky undertaking by individual growers to an organised business at a stipulated price. By a levy on all production, when necessary, the risk of export has been removed from an individual basis to a district basis. This is quite equitable, as the export of the surplus quantity must result in an improvement of the local market to the benefit of all growers.

Other Fruits Section.

Tropical Fruit Salad.—The growth of the tropical fruit salad industry has been the outstanding development in the other fruits section throughout the past year. Several Brisbane canners now engage in the processing of this product, the manufacture of which absorbs papaws, pineapples, passion fruit, bananas, and oranges. All sections of the fruit industry benefit by this trade, but the industry which has principally benefited is the papaw industry. This is clearly indicated by the fact that 267 tons of ripe papaws were absorbed in the manufacture of this line during the past year. The fruit salad industry has increased by leaps and bounds, and one factory alone has indicated its requirements for this line for this year at 10,000 cases papaws, 11,000 cases pineapples, 650 bags passion fruit, 500 cases bananas, and 10 tons oranges. Papaws for this purpose are supplied

direct to factory, but supplies are supplemented by clearances from the market, which has the effect of a satisfactory price being maintained for the fresh fruit.

Canning Strawberries.—A recent development has been the canning of strawberries. Growers now receive 5¾d. per lb. net for canning berries, a price which offers them the opportunity of effecting a reasonable control over market prices.

General.

Trading Activities.—The value of this service to growers has been further demonstrated throughout the year by a considerable extension of the activities. Excluding the considerable amount of trading done in the Bowen district, purchases by growers through this Department for the year under review total £21,500. The principal requirements have been in fertilizers, sprays, and dusts, fruit wraps, wood wool, and lining paper.

Advertising.—Advertising efforts were again concentrated upon the distribution of high-class coloured posters depicting Queensland fruits, and educational booklets.

It is the policy of the Committee of Direction to distribute advertising material only in those areas where Queensland fruits are marketed. Thus, banana posters have been distributed throughout Australia, pineapple posters in Australia and New Zealand, but citrus and deciduous posters have been confined to Queensland. The distribution policy also embraces the forwarding of posters to schools, and the schools of the various States concerned have shared in the distribution of the posters listed above. This distribution to schools is keenly appreciated, and many letters requesting further supplies have been received.

During the year a new poster for Stanthorpe fruits was produced and met with instant response from retailers and schools. With the distribution to schools a pamphlet was sent descriptive of the health values of the fruits. Steps are also being taken to issue a papaw poster for distribution principally in Sydney and Melbourne where efforts have been continued to popularise this fruit.

The Committee of Direction co-operated with the Royal National Association by erecting a very large poster display in the Fruit Pavilion at the 1934 Royal Show at Brisbane, which, in conjunction with the fruits exhibited, presented a very bright appearance and brought the advertisng efforts of the Committee prominently before the public. The model banana ripening plant was exhibited and ripened bananas were sold in conjunction with this exhibit.

For the first time, a comprehensive tropical fruit exhibit was staged by the Committee of Direction at the Melbourne Centenary Show. This display was most effectively arranged, and was so attractive that all sections of the fruit industry in Queensland have agreed to an exhibit being staged at the 1935 Melbourne Show.

Early in the year the organisation co-operated with the Cinema Branch of the Department of Commerce in the production of a film depicting the pineapple industry in all its phases. An attractive "talkie" film has resulted which should prove of great advertising value both in Australia and in stimulating sales of canned pineapples overseas.

Fruit and Vegetable Distribution Scheme.

The successful launching in February last and the subsequent operation of the fruit and vegetable distribution scheme has been an outstanding achievement of the past year. The scheme, inaugurated at the instigation of the Minister for Agriculture and devised by the Marketing Branch of the Department, after consultation with the Committee of Direction and the Railway Department, has been an unqualified success, the growers to benefit principally being those of the Granite Belt, whose fruits were in season at the time the scheme was launched. It is obvious that the scheme has been responsible for opening up fresh avenues of distribution, as at the commencement some of the railway stations supplied had not been heard of before by experienced men in the wholesale and retail fruit trade. Except for one short period, during particularly hot weather, complaints have been at a minimum, and numerous letters of appreciation have been received.

The success of the scheme can be attributed primarily to the principles on which it is based—viz., good-quality material, cash with order, half-bushel case lots, and a special flat freight rate granted by the Railway Department, which not only reduced prices to distant purchasers, but also made for simplicity in that a uniform price could be quoted at all stations; and secondly, but most important, to efficient co-operation in carrying out the details of the scheme between the Railway Department and the Committee of Direction, particularly the work of the latter, on which its administration devolved.

Under the scheme people in far-distant places can secure fruit and vegetables at suburban rates. Owing to the fact that prices have to be nominated six weeks ahead, the scheme has required very careful handling, but the fact that on a total of 13,924 packages despatched from the beginning of February to 8th August a surplus of £21 only is shown, is conclusive evidence that the fruit and vegetables have been offered at the lowest possible prices. Wherever possible, orders have been handed to growers for fulfilment, but in the case of mixed vegetables, it was necessary for these to be procured and packed in Brisbane. Purchase on the Brisbane market was also necessary where quick delivery was required. The most popular demand was for apples and mixed vegetables, but the following table shows the distribution of the various fruits under the scheme up to 8th August:—

	Cases.
Apples	6,634
Vegetables	3,968
Pineapples	986
Bananas	573
Tomatoes	236
Custard Apples	303
Oranges	634
Pears	4
Grapes	601
Mandarins	3
	13,942

There is no doubt but that the scheme has been of benefit to both growers and consumers, and now that the initial stages have been successfully passed, it should prove of increasing benefit.

HONEY BOARD.

Personnel of the Board to 8th March, 1936:—Messrs. O. N. Tanner (Chairman), C. W. Edwards, H. E. Fagg, R. V. Woodrow, and E. Graham (Director of Marketing).

An exceptionally large flow of honey was experienced in 1934, also a great increase in the receivals of second grade honey, particularly in the early part of that year. This factor, together with keen Southern competition, was responsible for the Board's action, in the interests of growers generally, in lowering the price somewhat, and so reducing the surplus. The matter of export was again given consideration, but up to the present it has not been thought desirable to proceed further in the matter. With reference to the marketing of beeswax, however, a strong demand existed, enabling the Board to increase the price to 1s. 8d. per lb. throughout portion of the year.

The sale of 60 lb. containers of honey during 1934-35 amounted to 11,738 tins, compared with 11,256 for the previous year, while 10,371 lb. of beeswax were disposed of, as against 15,480 lb. in 1933-34. The prices realised for honey ranged from 1½d. to 4½d. per lb., and in respect to beeswax, 1s. 4d. to 1s. 8d. per lb.

The policy of marketing through the same Brisbane agents as previously is being continued, but where it is considered by the Board to be in the best interests of the individuals concerned exemptions are granted to allow of such growers disposing of their honey locally.

In January the Board found it necessary to appoint a secretary owing to the demise in December last of Mr. H. H. Bentley. Mr. W. H. Carter was selected to fill the vacancy.

NORTHERN PIG BOARD.

Personnel of the Board to 31st December, 1935.—Messrs. D. Johnston (Chairman), R. Campbell, F. W. Collard, J. E. Foxwell, A. A. Knudson and E. Graham (Director of Marketing).

The Board members' term of office expired on 31st December, 1934, but on calling for nominations for a further period all were returned unopposed, Mr. Johnston being appointed Chairman.

During the year ended 30th June, 1935, the Board handled 8,543 pigs, an increase of 147 as compared with last year. Of the above total handled 7,218 were first grade, 821 second grade, 113 third grade, and 249 were utilised for small goods purposes. Nineteen died in transit, and were paid for from the insurance fund, 118 were sold to butchers alive, and the balance taken over by the North Queensland Co-operative Bacon Association Limited.

The quality of the pigs received during the year showed an improvement on the previous year, and were more suitable for the manufacture of bacon for the tropics, where the bulk of the North Queensland Co-operative Bacon Association's manufactured goods is marketed.

The number sold to butchers alive was a decrease as compared with last year, due to the lack of supplies for that trade. In the near future the Board hopes to be able to supply this trade again in full, as supplies are showing an improvement.

The average price paid for first-grade baconers was 4.83d. per lb., which compares favourably with the average price paid throughout the State.

The total amount paid to the growers was £17,627 3s. 2d. The year's transactions show a net profit of £113 9s. 11d.

PEANUT BOARD.

Personnel of the Board to 27th August, 1935.—Messrs. C. F. Adermann (Chairman), R. R. Nothling, A. G. Whiting, L. V. Young, and E. Graham (Director of Marketing).

At the election in August last Messrs. Whiting and Young were the successful candidates, Mr. Young defeating Mr. N. J. Christiansen (Chairman) by six votes. Mr. Adermann was appointed Chairman for the ensuing twelve months. In January Mr. N. A. Nielsen, the Central Queensland representative, resigned, and Mr. Nothling was appointed by the Minister to fill the vacancy for the remainder of the term ending 27th August next.

1934 *Season.*—As was mentioned in last year's report, the second largest planting in the history of the industry took place, and, seasonal conditions also being favourable, a heavy crop resulted. The total receivals make the second largest crop produced in Queensland, only that of the 1929 season being greater. The receival figures were:—

	Lb.	Lb.
Virginian Bunch—		
A grade	2,318,455	
B grade	1,356,719	
C grade	344,552	
		4,019,726
Spanish—		
A grade	3,218,150	
B grade	100	
		3,218,250
Valencia—A grade		22,194
		7,260,170 lb. or 3,241 tons.

The new grading system instituted proved highly successful from the Board's point of view, and very satisfactory to the growers.

On the 23rd February, 1935, an interim payment of ¼d. per lb. was made to growers on all peanuts received in this Pool. Total payments to date, including the first advance, amount to £67,952 17s. 7d., exclusive of the levy of £7,561 17s. 5d. The season is not yet finalised, but it is anticipated that finalisation will take place in about two months' time, when a further satisfactory payment will become available to growers.

1935 *Season.*—Following on the comparatively large crop last season, growers were advised at planting time to sow sufficient seed to produce a yield of not less than 4,000 tons. As a consequence, a record area (12,500 acres), was planted, and the largest tonnage of peanuts within the history of the industry in this State

has been harvested, receivals by the Pool to 30th June, 1935, being:—

	Lb.
Virginian Bunch	3,340,180
Spanish	4,066,703
Valencia	15,513
	7,422,396 lb. or 3,313½ tons.

It is estimated that a further 900 tons are still in the fields.

Finance was again successfully arranged with the Rural Credits Department of the Commonwealth Bank of Australia on similar terms to 1934 season, but without a Government guarantee, the Bank being satisfied with the security offered by the Board. First advance payments to growers to date total £56,706 14s. 10d., including the levy, which amounts to £7,731.

The decision of the Tariff Board on the Peanut Board's application for an increase in duty on nuts in shell, referred to in last year's report, was adverse, but owing to the substantial increase in the value of silver this year, and the fact that Chinese currency is on a silver basis, the price of Chinese peanuts landed in Australia was considerably increased, thus removing these nuts from direct competition with the Queensland product.

It is pleasing to be able to report a definite expansion in the industry. The sales figures for May, 1935, exceed the previous highest recorded in any month (July 1932) by over £1,000, and this amount, in turn, was eclipsed by the June, 1935, sales realisations by over £2,600, and the market prospects generally are encouraging. It seems rational, even this early in the year, to anticipate that the sales for the year 1935 (January to December) will exceed the previous best selling year (1932), and probably, for the first time since the inception of the industry, bring the sales figures for any one year over the £100,000 mark. In view of the position above outlined, and the continued confidence of growers in the industry, they are busy preparing for another satisfactory planting this year, and it looks as though the acreage sown last season will be at least maintained.

During the period under review, Board members conferred on several occasions with the Central Queensland organisation concerned in the sale of peanuts with the view to arriving at some mutual arrangement in connection with the marketing of peanuts grown in the Central district. Up to the date of this report, no agreement has been reached, but the Board is hopeful that further negotiations which are pending will result in only one organisation catering for growers in that area. In the event of this taking place, the Board is fully equipped to take over, having already established a depot in Rockhampton for the purpose of receiving and treating any nuts delivered during 1935 season. Several consignments have been received there to date.

NORTHERN PLYWOOD AND VENEER BOARD.

Personnel of the Board to 2nd May, 1936.—Messrs. J. F. Brett (Chairman), G. D. Gummow, G. A. Duffy and A. E. Gibson (Deputy for the Director of Marketing).

By an Order-in-Council dated the 18th April, 1935, plywood and veneer produced for sale in the whole of the northern portion of the State, from the 23rd degree of South latitude, were declared to be commodities under the Primary Producers' Organisation and Marketing Acts. The Northern Board is a marketing board operating on similar lines to the Southern organisation.

Other than to state that satisfactory progress has been made to date, it is not possible to furnish a report at this stage on the activities of the more recently constituted body because of the brief duration of time for which it has been functioning.

PLYWOOD AND VENEER BOARD.

Personnel of the Board to 2nd May, 1936.—Messrs. J. F. Brett (Chairman), R. H. Bentley, M. J. G. Brims, G. Brown, C. R. Paterson, J. E. Christoe, J. W. Jackson, R. J. Donaldson, G. W. Nutting, P. S. Reid, G. A. Duffy, and A. E. Gibson (Deputy for the Director of Marketing).

In January Messrs. D. G. Brims & Sons Pty. Ltd. decided to become members of the organisation, and on 2nd February Mr. M. J. G. Brims was appointed a member in place of Mr. W. L. Johnson, resigned.

The term of the Pool expired by effluxion of time on the 2nd May, 1935, but in response to an application by the Board, operations were extended for a further period of one year to 2nd May, 1936. The personnel of the Board remained the same, Mr. J. F. Brett being re-elected Chairman.

Prior to May, 1934, the plywood industry was conducted without any thought of co-operation between manufacturers. Rather was a policy of a definite individual character applied which caused drastic competition in every way. With the inception of the Board on 3rd May, 1934, however, confidence amongst manufacturers was immediately established. A co-operative policy was inaugurated, having for one of its objects complete stabilization, which has been achieved. Also, the co-operation of members has been responsible for the employment of a greater number of employees than at any other period of the industry, with less loss of time. The quality of plywood is now on a high standard, and the marketing conditions have been organised on a proper and orderly basis. As a result, sales have increased very considerably over the previous year, but in spite of this fact it is felt that with an increase in output further markets should be sought, and therefore efforts are being made to foster an overseas trade.

The Board is now in a position to apply more scientific methods and engage in research in regard to the general production of plywood. With this objective in view applications have been called for the position of chemist to the Board, in order that methods of glueing and manufacture might be standardised and tests made of all raw materials. Additionally, the Board has sought the co-operation of the Council for Scientific and Industrial Research in these matters, and the services of one of their most

experienced officers will be made available shortly. A substantial donation has been made to the funds of the Council towards defraying the cost of the investigations. At the request of the Board a series of moisture content tests with veneers was conducted in Melbourne recently, the results of which will be of much benefit to manufacturers.

Advantage has been taken of the assistance offered by the Department of Agriculture and Stock with regard to the testing of materials in their laboratories, and samples of casein have been submitted for analysis by manufacturers.

The total quantity of pine plywood delivered for the period of fourteen months, 3rd May, 1934, to 30th June, 1935, was 53,279,676 square ft., valued at £339,657 and made up as follows:—

	Square feet.
Queensland	8,258,354
Interstate	44,056,157
Overseas	965,165

The cost of administrative expenses for the period was .69d. per 100 s. ft., and a quantity discount in the form of a bonus allowed to encourage the booking of large orders and the holding of stocks by Southern merchants absorbed ·82d., making a total of 1·51d.

STATE WHEAT BOARD.

Personnel of the Board to 31st July, 1935.—Messrs. E. A. Thomas (Chairman), J. J. Booth, W. J. Brimblecombe, T. W. McIntyre, and E. Graham (Director of Marketing).

No Board election took place during the year, the members' term of office being extended by the Minister until the 31st July, 1935. Nominations have, however, been called for four growers' representatives to hold office from the 1st August for one or three years, such period to be determined by a ballot of growers.

1933-34 *Season.*—Deliveries totalled 3,950,129.26 bushels, classified as follows:—

	Bushels	lb.
Milling—		
Q1	1,024,992	28
Q2	1,921,439	12
Q2A	570,065	7
	3,525,496	47
Feed—		
F1A	36,870	13
F1	335,470	20
F2	52,292	6
Total	3,950,129	26

The weight loss was 132,993·16 bushels. The net payments per bushel to growers were, according to classification:—

	s. d.	s. d.
Q1	2 10	
Q2	2 8	to 2 7
Q2A	2 6	to 2 4
F1A	2 1	
F1 and F2	1 10	

The total administrative cost amounted to £64,015 6s. 5d., equal to 3.889 pence per bushel.

1934-35 *Season.*—This season was in very favourable contrast with the preceding one as far as weather conditions were concerned, with the result that the Board was able to classify over 99 per cent. as of milling grades, leaving only slightly less than 1 per cent. of feed wheat, and of the approximately 99 per cent. of milling only 4 per cent. was represented in Q2A grade. During November and December the market had again fallen from the level which had ruled during the disposal of the previous year's crop, but, fortunately, it exhibited some recovery as the New Year approached, and the Board succeeded in arranging for the sale of the whole of the milling wheat on similar terms to those agreed on by the Board with the mills in June, 1934. Deliveries commenced on the 2nd January. Receivals to date amount to 3,673,331 bushels, on which growers have received two advance payments, the finance having again been obtained from the Rural Credits Department of the Commonwealth Bank of Australia. Excluding premiums and dockages, these advances amount to 2s. 6d. per bushel on milling, 1s. 9d. on F1A and F1, and 1s. 6d. on F2. The Board is in a position to indicate that another interim advance will be made available within the next few weeks.

Seed Wheat.—The extensive demand for seed wheat this year would seem to indicate that growers have not lost confidence in the industry, the sales of seed wheat from the Board's grading depots constituting what is probably a record in that department. As a result of the Board's representations to the Minister on behalf of growers whose financial position made it difficult for them to obtain seed wheat supplies, the Government gave a guarantee for an amount of £6,000 on similar terms and conditions as were applicable in previous years.

GENERAL.

It may be stated in a general sense that the principles of orderly marketing of primary products have continued to gain in popularity with producers.

Within the year an additional pool board has been constituted under the Act.

In a review of the position dating from the inception of the first pool constituted and a board of growers representatives elected to control the sales of the commodity, some features of interest become manifest. For instance a very material change has taken place in relation to the matter of finance of pool boards. Originally financial institutions were insistent upon a Government guarantee being provided for the sums of money covering loans to commodity boards to permit of the boards making prompt advance payments to growers, upon delivery of their commodity to the pool. However, the experience with the operations of pool boards has been such as to increase the confidence of financial institutions to the extent that for the first time in the history of marketing through pool channels, the necessary finance has been provided either by the Commonwealth Bank Rural Credits Branch, or by one of the associated banks, without guarantee from the Government being required for the amount of the overdraft.

The commodities to which the collective system of marketing has been applied have made satisfactory development and in many cases very material increases in the volume of production of the commodities have taken place.

It is still the case that no pool once formed under the marketing Acts of this State, has ceased to function.

There has been indication of a revival in value of some of the primary products and although prices have not attained the level of some years ago, an improvement in marketing returns has been noticeable. For instance, wheat, dairy products, canned pineapples, and other commodities have exhibited a firmer tone in the local and overseas markets.

At the present time primary products with an aggregate value exceeding £17,000,000 per annum are disposed of through marketing organisations.

Over the term of years during which orderly marketing has been in operation more than £100,000,000 has been distributed by pool boards to primary producers.

The fact that every pool board established under the marketing Acts has been able to meet its financial obligations for loans raised for purposes connected with the pools, can be accepted as evidence that the pooling system is based on sound economic principles.

Government Representation on Commodity Boards.

The practice of arranging for officers of this Department possessing special knowledge of the particular products that have been made the subject of a pool to act as Government representatives on the various boards has again been followed throughout the year with satisfactory results. I wish to record the interest the officers concerned have taken in this particular work and to thank them for the services they have rendered in this connection.

E. GRAHAM,
Under Secretary for Agriculture and Stock,
and Director of Marketing.

APPENDIX 1.

STATEMENT SHOWING (IN BOXES) TOTAL MANUFACTURE, SALES, AND CONSIGNMENTS OF QUEENSLAND BUTTER, JULY, 1934, TO JUNE, 1935.

Month.	Manufacture.	Sales.			Overseas, S/Stores, and other Countries.	Consigned and/or Sold to Great Britain.
		Queensland.	Interstate.	East and Tinners.		
1934.						
July	110,675	41,673	588	5,374	180	74,271
August	122,306	42,007	5,530	5,610	520	60,756
September	153,848	37,665	1,000	4,432	307	97,484
October	214,179	41,411	..	6,910	363	151,745
November	238,321	37,663	..	6,102	287	167,564
December	298,412	35,882	..	6,329	370	231,623
1935.						
January	320,491	34,177	4	8,750	270	288,346
February	257,587	33,082	..	6,111	331	236,391
March	239,954	36,891	..	7,413	326	210,664
April	166,705	41,005	..	8,219	477	128,107
May	117,064	42,231	11,028	8,033	948	74,749
June	85,860	39,880	29,644	5,444	193	21,340
Totals	2,325,402	463,567	47,794	78,727	4,572	1,743,040

Quantity shown in boxes each containing 56 lb.

APPENDIX 2.

COMPARISON OF MANUFACTURE, SALES, AND CONSIGNMENTS OF QUEENSLAND BUTTER FOR YEARS 1925-26 TO 1934-35.

Year.	Manufacture.	Sales.			S/Stores and Other Countries.	Dunkirk.	Consigned and/or Sold to Great Britain.
		Queensland.	Interstate.	East and Tinners.			
	Boxes.	Boxes.	Boxes.	Boxes.	Boxes.	Boxes.	Boxes.
1925-26	1,074,789	399,624	51,360	19,405	1,214	1,000	608,334
1926-27	875,552	389,698	69,411	19,807	1,680	5,004	392,611
1927-28	1,240,125	376,626	60,893	35,222	4,878	..	764,539
1928-29	1,320,871	400,414	110,795	32,838	4,414	..	765,897
1929-30	1,358,954	420,389	84,712	33,503	4,284	..	805,951
1930-31	1,658,689	393,643	36,983	30,887	3,285	..	1,200,691
1931-32	1,697,445	399,785	7,075	41,286	2,145	..	1,243,950
1932-33	1,785,523	427,920	7,333	53,544	3,212	..	1,295,035
1933-34	2,212,707	425,566	9,139	68,430	4,191	..	1,692,142
1934-35	2,325,402	463,567	47,794	78,727	4,572	..	1,743,040

Quantity shown in boxes each containing 56 lb.

APPENDIX 3.

Month.	Local at Parity.			Export.			Total.		Realisation under Commonwealth Equalisation.		Benefit of Equalisation Scheme over Parity Prices.
	Boxes.	Rate.	Realisation.	Boxes.	Rate.	Realisation.	Boxes.	Realisation.	Rate per box.	Realisation.	
		s. d.	£ s. d.		s. d.	£ s. d.		£ s. d.	£	£ s. d.	£ s. d.
July	42,261	74 6	78,711 2 3	79,825	76 0	151,667 10 0	122,086	230,378 12 3	2·9376583	358,646 18 10	128,268 6 7
August	47,537	80 9	95,965 6 4	66,886	72 6	121,230 17 6	114,423	217,196 3 10	2·894676	331,217 10 2	114,021 6 4
September	38,665	78 3	75,638 8 2	102,223	77 8	198,482 19 10	140,888	274,121 8 0	2·6505753	373,434 4 10	99,312 16 10
October	41,411	72 0	74,539 16 0	159,018	75 8	300,809 1 0	200,429	375,348 17 0	2·41949856	484,937 13 5	109,588 16 5
November	37,663	79 6	74,855 4 3	173,953	90 6	393,568 13 3	211,616	468,423 17 6	2·54156361	537,835 10 5	69,411 12 11
December	35,882	75 9	67,951 10 9	238,322	86 9	516,860 16 9	274,204	584,812 7 6	2·5666332	703,781 1 9	118,968 14 3
January	34,181	88 3	75,411 16 8	297,366	77 7	576,766 2 6	331,547	652,177 19 2	2·30508289	764,243 6 2	112,065 7 0
February	33,082	92 0	76,088 12 0	242,833	79 6	482,630 11 9	275,915	558,719 3 9	2·40218801	662,799 14 0	104,080 10 3
March	36,891	79 6	73,320 17 3	218,403	87 11	480,031 11 8	255,294	553,352 8 11	2·59117114	661,510 8 9	108,157 19 10
April	41,005	79 6	81,497 8 9	136,803	76 7	261,920 14 9	177,808	343,418 3 6	2·63895104	469,226 11 11	125,808 8 5
May	58,259	84 0	111,843 18 0	83,730	84 4	176,530 15 0	136,989	288,374 13 0	2·96385673	406,015 15 0	117,641 2 0
June	69,524	92 6	160,774 5 0	26,977	92 9	62,552 18 4	96,501	223,327 3 4	3·21984807	310,718 11 2	87,391 7 10
	511,361	..	1,046,598 5 5	1,826,339	..	3,723,052 12 4	2,337,700	4,769,650 17 9	..	6,064,367 6 5	1,294,716 8 8

Quantity shown in boxes each containing 56 lb.

APPENDIX 4.

COMPARISON OF NET PRICES RETURNED TO FACTORIES ON BASIS OF BOARD'S EQUALISATION FIGURES, YEARS 1929-30 TO 1934-35.

Month.	1929-1930. Quantity Sold (Boxes).	Total Net Value.	Net Value per Box.	Net Value per lb. (Approximate).	1930-1931. Quantity Sold (Boxes).	Total Net Value.	Net Value per Box.	Net Value per lb. (Approximate).
		£ s. d.	£	s. d.		£ s. d.	£	s. d.
July	76,109	360,714 1 6	4·7394405	1 8½	89,469	361,589 18 3	4·0415106	1 5½
August	69,238	330,269 8 1	4·7700599	1 8⅛	97,190	362,818 16 1	3·7330878	1 4
September ..	68,340	321,658 10 4	4·7067386	1 8⅛	112,044	378,332 8 4	3·3766415	1 2⅛
October ..	82,639	376,275 16 5	4·5532475	1 7½	124,975	426,612 10 2	3·4135829	1 2⅜
November ..	104,739	453,053 12 0	4·3255484	1 6½	139,678	469,539 15 6	3·3615873	1 2⅜
December ..	112,514	474,732 18 7	4·2193232	1 6	152,655	533,044 9 10	3·4918247	1 3
January ..	153,659	583,766 17 5	3·7991063	1 4¼	130,707	463,628 13 10	3·5470839	1 3⅛
February ..	165,800	606,246 13 8	3·6564939	1 3⅜	161,191	562,841 10 1	3·4917676	1 3
March	172,885	642,978 8 8	3·7191106	1 4	215,864	755,030 15 9	3·4977152	1 3
April	155,664	597,438 0 6	3·8379975	1 4⅛	148,112	501,965 10 8	3·3890943	1 2½
May	96,794	390,604 15 0	4·0354232	1 5⅛	163,794	546,296 9 0	3·3352654	1 2⅞
June	90,458	371,038 12 1	4·1017777	1 5⅛	129,810	436,702 12 10	3·364168	1 2⅞
	1,348,839	5,508,777 14 3	4·0840885	1 5½	1,665,489	5,798,403 10 4	3·4815022	1 3
	1931-1932.				1932-1933.			
July	106,852	365,276 13 3	3·4185291	1 2⅜	115,103	364,643 16 0	3·1679781	1 1⅞
August	116,584	406,126 9 10	3·4835526	1 3	98,066	302,213 5 6	3·0817335	1 1⅛
September ..	105,468	350,417 12 5	3·3225019	1 2⅛	91,846	266,665 3 6	2·9033945	1 0⅛
October ..	132,346	416,485 11 2	3·1469449	1 1⅛	111,271	299,637 16 0	2·6928651	0 11⅛
November ..	120,478	373,499 15 1	3·1001491	1 1⅛	158,661	387,965 0 0	2·4452448	0 10⅛
December ..	189,338	573,669 7 7	3·0298693	1 1	149,088	343,180 2 10	2·301863	0 9⅞
January ..	209,949	630,772 5 1	3·0044071	1 0⅞	156,857	346,020 2 6	2·2059592	0 9⅛
February ..	174,058	514,191 18 5	2·9541413	1 0⅜	237,577	481,251 0 0	2·0256633	0 8⅜
March	140,891	401,619 9 0	2·8505686	1 0⅛	248,744	562,481 13 10	2·2612875	0 9⅛
April	116,090	348,214 9 8	2·9995218	1 0⅜	169,206	390,264 19 0	2·3064487	0 9⅜
May	158,787	483,052 15 3	3·042143	1 1	152,716	370,992 13 0	2·4292979	0 10⅛
June	123,400	376,588 17 4	3·0517736	1 1	97,909	271,576 1 4	2·77376	0 11⅛
	1,694,241	5,239,915 4 1	3·0927804	1 1⅛	1,787,044	4,386,891 13 6	2·4548314	0 10⅛
	1933-1934.				1934-1935.			
July	82,151	243,728 8 5	2·9668345	1 0⅞	122,086	358,646 19 0	2·9376583	1 0⅛
August	89,666	252,552 3 9	2·816588	1 0	114,423	331,217 10 2	2·894676	1 0⅛
September ..	103,987	267,211 10 8	2·569663	0 11	140,888	373,434 4 10	2·6505753	0 11⅜
October ..	154,016	339,864 14 7	2·2066846	0 9⅜	200,429	484,937 13 5	2·41949856	0 10⅜
November ..	214,133	421,993 0 3	1·9707052	0 8⅜	211,616	537,835 10 5	2·54156361	0 10⅞
December ..	256,218	513,807 10 0	2·0053529	0 8⅜	274,204	703,781 1 9	2·5666332	0 11
January ..	238,523	502,844 0 5	2·1081574	0 9	331,547	764,243 6 2	2·30508289	0 9⅜
February ..	215,022	448,691 19 0	2·0867258	0 9	275,915	662,799 14 0	2·40218801	0 10⅛
March	261,770	572,046 19 5	2·1853038	0 9⅜	255,294	661,510 8 9	2·59117114	0 11⅛
April	204,270	432,788 1 6	2·118706	0 9	177,808	469,226 12 0	2·63895104	0 11⅝
May	247,160	669,759 4 8	2·7098205	0 11⅛	136,989	406,015 15 0	2·96385673	1 0⅜
June	132,552	364,783 16 1	2·7520053	0 11⅜	96,501	310,718 11 2	3·21984807	1 1⅛
	2,199,468	5,030,071 8 9	2·2869492	0 9⅛	2,337,700	6,064,367 6 8	2·59415984	0 11⅛

NOTE.—As final London figures for April, May, and June, 1935, are not yet to hand, the prices in respect of these months are estimates only.

Quantity shown in boxes each containing 56 lb.

REPORT OF THE REGISTRAR-GENERAL ON AGRICULTURAL PRODUCTION FOR THE YEAR 1934.

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REPORT OF THE REGISTRAR-GENERAL ON AGRICULTURAL PRODUCTION FOR THE YEAR 1934.

DAIRYING.

Table No. I.

RETURN SHOWING THE PROGRESS OF THE DAIRYING INDUSTRY SINCE THE YEAR 1909.

Year.	Dairying Establishments, Exclusive of Factories.	Dairy Cows. In Milk.	Dairy Cows. Dry.	Dairy Cows. Heifers within three months of milking.	Dairy Cows. Total.	—	Production of Butter.	Production of Cheese.
							Lb.	Lb.
						1890 ..	*2,000,000	*170,240
						1895 ..	3,719,523	1,841,799
						1900 ..	8,680,389	1,984,705
1909	15,279	228,497	105,342	..	333,839	1905 ..	20,319,976	2,682,089
1910	16,079	262,788	102,656	..	365,444	1910 ..	31,258,333	4,146,661
1911	16,225	237,997	119,098	..	357,095	1911 ..	27,858,535	3,718,257
1912	16,579	267,847	107,813	..	375,660	1912 ..	30,307,339	3,947,615
1913	17,866	285,403	106,036	..	391,439	1913 ..	35,199,387	5,395,050
1914	18,029	288,334	98,977	..	387,311	1914 ..	37,230,240	7,031,869
1915	17,876	218,511	116,732	..	335,243	1915 ..	25,456,714	4,383,410
1916	18,410	247,855	95,456	..	343,311	1916 ..	28,967,279	8,495,825
1917	19,404	303,133	96,375	..	399,508	1917 ..	38,930,690	11,142,114
1918	19,313	255,039	126,466	..	381,505	1918 ..	32,371,575	8,636,700
1919	18,952	211,331	161,815	..	373,146	1919 ..	26,213,514	8,296,318
1920	20,457	335,026	113,608	..	448,634	1920 ..	40,751,373	11,512,262
1921	21,695	423,251	130,957	..	554,208	1921 ..	60,923,194	15,200,527
1922	21,931	418,351	145,332	..	563,683	1922 ..	53,785,599	10,560,316
1923	22,019	357,203	155,326	..	512,529	1923 ..	40,659,634	7,221,355
1924	22,599	433,531	151,355	..	584,886	1924 ..	58,187,954	11,093,886
1925	22,581	463,436	147,900	..	611,426	1925 ..	70,748,646	14,242,721
1926	22,451	397,606	157,913	55,708	611,227	1926 ..	50,991,985	8,740,355
1927	22,547	436,337	139,970	69,009	645,316	1927 ..	62,552,917	12,233,520
1928	22,457	492,405	144,562	33,838	670,805	1928 ..	73,820,292	15,047,825
1929	22,763	507,100	142,477	31,000	680,577	1929 ..	77,483,845	13,229,337
1930	23,270	546,643	147,385	30,295	724,323	1930 ..	90,377,751	14,249,173
1931	24,016	590,656	152,668	31,977	775,301	1931 ..	100,565,158	12,261,457
1932	24,591	586,995	173,557	32,391	792,943	1932 ..	96,317,201	11,157,781
1933	25,363	673,544	164,978	38,887	877,409	1933 ..	114,032,603	13,941,728
1934	26,102	729,821	172,932	36,501	939,254	1934 ..	136,793,670	13,531,480

Value of Dairying Production 1933-34, £6,000,000. * Estimated.

Table No. II.

RETURN SHOWING CLASSIFICATION OF DAIRY ESTABLISHMENTS (NOT FACTORIES) ACCORDING TO NUMBER OF DAIRY COWS (INCLUDING HEIFERS INTENDED FOR MILKING).

District.	Under 5.	5 to 9.	10 to 14.	15 to 19.	20 to 29.	30 to 49.	50 to 99.	100 and Upwards.	Total.
Moreton	978	310	524	668	1,555	2,295	1,734	325	8,389
Wide Bay	680	366	210	268	720	1,874	2,091	405	6,614
Port Curtis	159	58	90	118	333	679	549	135	2,121
Edgecumbe	1,055	363	141	66	80	81	59	17	1,862
Rockingham	661	138	34	34	103	248	236	25	1,479
York Peninsula	53	5	2	2	2	4	13	4	85
Carpentaria	2	..	..	1	2	5	6	2	18
Central-Western	..	..	1	..	..	..	1	..	2
South-Western	4	4	1	1	3	7	1	..	21
Central	3	7	7	3	13	5	8	..	46
Maranoa	20	20	19	9	36	86	70	8	268
Downs	797	234	317	441	947	1,311	978	172	5,197
Totals State	4,412	1,505	1,346	1,611	3,794	6,595	5,746	1,093	26,102

Table No. III.

RETURN SHOWING THE RESULTS OF THE DAIRYING INDUSTRY IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE DURING THE YEAR 1934.

Districts.	HOW UTILISED.								ESTABLISHMENTS.			DAIRY CATTLE.			Average per Cow.	BUTTER MADE.			CHEESE MADE.		
	Total Milk Obtained.	For Butter on Farms.	For Cheese on Farms.	For Domestic Purposes by Producer.	Separated for Sale.	Sold for Consumption as Milk.	Sold to Condensed Milk Factories.	Sold to Cheese Factories.	Dairying.	Butter Factories.	Cheese Factories.	In Milk.	Dry.	Heifers, &c.		At Factories.	By Farmers.	Total.	At Factories.	By Farmers.	Total.
	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	No.	No.	No.	No.	No.	No.	Gall.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
Moreton.																					
Brisbane (A) ..	4,089,103	98,771	..	154,323	1,706,641	2,129,368	..	..	572	..	..	9,775	3,098	715	318	..	43,134	43,134	..	..	..
Brisbane (B) ..	1,427,271	32,122	..	58,429	428,369	908,351	..	..	200	..	..	3,545	1,118	238	306	..	13,025	13,025	..	..	..
Beaudesert	13,661,893	200,864	..	155,013	13,116,772	189,244	..	..	602	1	..	29,633	5,460	4,535	389	3,922,661	85,821	4,008,482	..	..	..
Caboolture	1,042,378	20,538	..	15,984	993,606	12,250	..	..	102	1	..	2,446	671	195	334	2,769,272	10,203	2,779,475	..	..	..
Cleveland	209,411	17,834	..	44,530	118,488	28,559	..	..	170	..	..	514	224	33	148	..	8,455	8,455	..	..	..
Crow's Nest	4,805,734	130,727	..	77,940	4,591,337	5,730	..	..	385	1	..	12,531	2,251	386	325	2,017,624	65,716	2,083,340	..	..	..
Dugandan	6,177,997	132,734	..	123,092	5,913,651	8,520	..	..	558	1	..	15,962	1,926	206	345	4,835,658	66,609	4,902,267	..	..	..
Esk	1,829,830	37,469	..	34,912	1,757,449	..	..	..	137	1	..	5,104	893	162	305	2,355,116	18,743	2,373,859	..	..	..
Gatton	4,059,965	137,037	..	121,325	3,785,873	11,000	..	4,730	474	2	..	9,655	2,326	171	339	3,154,465	68,418	3,222,883	3,037	..	3,037
Goodna	280,656	6,588	..	34,191	231,209	8,668	..	..	31	..	..	666	191	29	327	..	3,284	3,284	..	..	..
Harrisville	4,040,430	110,818	..	83,139	3,778,512	67,961	..	..	393	..	..	11,124	1,657	398	316	..	55,735	55,735	..	..	..
Ipswich	2,047,298	40,084	..	28,912	1,809,854	168,448	..	..	172	2	..	5,054	1,108	25	332	5,080,412	20,040	5,100,452	..	..	..
Kilcoy	2,887,027	50,937	..	40,384	2,792,786	2,920	..	..	152	..	..	8,087	1,686	413	295	..	25,963	25,963	..	..	..
Laidley	3,688,198	116,005	..	123,033	3,440,228	8,932	..	..	424	1	..	9,645	1,308	342	337	1 997,713	58,346	2,056,059	..	..	..
Logan	3,012,801	117,040	..	86,123	2,495,129	314,509	..	..	437	1	..	8,591	2,115	698	281	7,543,144	48,705	7,591,849	..	..	..
Lowood	2,467,657	65,974	..	71,970	2,315,654	1,578	12,481	..	291	1	..	7,197	1,040	225	300	557,640	32,937	590,577	..	..	..
Marburg	2,377,050	55,560	..	43,361	2,278,129	..	..	..	253	..	..	6,154	627	51	351	..	28,016	28,016	..	..	..
Maroochy	8,379,096	234,340	..	242,805	7,832,827	69,124	..	..	1,038	2	..	23,191	3,471	825	314	5,259,571	115,540	5,375,111	..	..	..
Redcliffe	4,000,866	54,427	..	59,526	2,048,064	1,838,849	..	..	307	1	..	11,077	2,828	379	288	493,197	26,603	519,800	..	..	..
Rosewood	3,756,614	80,262	..	71,321	3,485,329	119,702	..	..	334	..	..	10,490	1,625	303	310	..	39,931	39,931	..	..	..
Southport	a8,906,230	135,721	..	104,757	8,431,521	144,231	..	90,000	417	..	1	19,736	4,159	1,131	373	..	64,414	64,414	91,711	..	91,711
Toogoolowah ..	4,549,741	89,493	..	83,395	4,367,225	9,628	..	..	297	..	..	12,860	2,789	494	291	..	44,813	44,813	..	..	..
Woodford	4,764,451	78,694	..	84,626	4,484,557	116,574	..	..	268	1	..	11,911	2,560	463	329	2,099,411	39,344	2,138,755	..	..	..
Wynnum	205,282	6,321	..	17,971	24,773	156,217	..	..	58	..	..	614	226	16	244	..	3,063	3,063	..	..	..
Oakey-Cooyar ..	1,722,105	59,480	..	37,752	1,624,873	..	..	..	125	..	..	5,129	939	244	284	..	28,229	28,229	..	..	..
Toowoomba-Helidon	2,020,846	58,542	..	42,423	1,913,655	6,226	..	..	192	..	..	5,135	1,025	1,478	328	..	29,460	29,460	..	..	..
Total Moreton ..	96,409,930	2,168,382	..	2,041,237	85,766,511	6,326,589	12,481	94,730	8,389	16	1	245,826	47,321	14,155	329	42,085,884	1,044,547	43,130,431	94,748	..	94,748
Wide Bay.																					
Biggenden	5,395,446	119,818	..	87,905	4,710,575	..	..	477,148	330	1	2	15,755	3,559	323	279	2,640,150	59,899	2,700,049	429,132	..	429,132
Bundaberg	3,763,995	288,292	..	197,655	3,038,622	239,426	..	..	829	1	..	11,672	3,750	476	244	1,929,565	143,069	2,072,634	..	..	..
Childers	429,386	23,190	..	66,901	325,645	13,650	..	..	190	..	..	1,705	590	238	187	..	11,344	11,344	..	..	..
Eidsvold	1,847,829	50,886	..	41,680	1,755,263	..	..	..	160	..	..	6,705	1,694	243	220	..	25,441	25,441	..	..	..
Gayndah	9,169,194	170,055	..	124,008	8,858,249	16,882	..	..	558	2	..	24,920	6,392	1,580	293	5,391,694	83,341	5,475,035	..	..	..
Gin Gin	1,079,255	107,598	..	42,495	923,304	5,858	..	..	270	..	..	4,770	1,354	219	176	..	44,590	44,590	..	..	..
Gympie	21,823,209	513,134	..	356,650	20,928,361	25,064	..	..	1,433	4	..	61,313	10,677	1,505	303	12,489,695	254,466	12,744,161	..	..	..
Kilkivan	1,357,532	33,183	..	21,937	1,302,012	400	..	..	108	..	..	4,763	1,387	192	221	..	16,661	16,661	..	..	..
Maryborough ..	2,777,199	191,491	..	88,608	2,340,928	156,172	..	..	474	1	..	7,696	2,616	1,201	269	1,052,583	89,150	1,141,733	..	..	..
Mount Perry ..	253,426	17,239	..	10,003	225,669	515	..	..	45	..	..	1,248	517	60	144	..	10,047	10,047	..	..	..
Nanango	13,387,679	284,822	..	169,492	12,902,948	30,417	..	..	834	2	..	31,060	7,871	860	344	8,040,827	124,192	8,165,019	..	..	..
Tiaro	3,423,796	95,813	5,550	63,655	3,258,516	262	..	..	301	..	..	13,030	3,275	371	210	..	48,190	48,190	..	5,000	5,000
Wienholt	23,642,662	278,225	..	269,063	23,091,874	3,500	..	..	1,082	2	..	44,121	12,357	837	419	10,047,973	137,443	10,185,416	..	..	..
	88,350,608	2,173,746	5,550	1,540,052	83,661,966	492,146	..	477,148	6,614	13	2	228,758	56,039	8,105	310	41,592,487	1,047,833	42,640,320	429,132	5,000	434,132
Port Curtis.																					
Banana	341,406	16,326	..	16,220	308,860	..	..	..	59	..	..	956	308	6	270	..	6,422	6,422	..	..	..
Gladstone	6,001,122	294,729	..	100,392	5,565,701	40,300	..	..	438	1	..	18,236	5,439	1,130	253	3,171,486	76,441	3,247,927	..	..	..
Monto	5,287,375	137,636	..	87,983	5,050,781	10,975	..	..	381	1	..	14,565	2,942	573	302	2,632,163	69,258	2,701,421	..	..	..
Mount Morgan ..	6,515,272	208,996	..	131,161	6,147,540	27,575	..	..	554	1	..	15,136	4,311	1,132	335	3,104,624	77,476	3,182,100	..	..	..
Rockhampton ..	7,039,988	276,650	..	165,058	6,029,755	568,525	..	..	678	2	..	19,172	7,521	1,193	264	1,873,386	136,225	2,009,611	..	..	..
St. Lawrence ..	18,095	5,700	..	3,645	7,300	1,450	..	..	11	..	..	140	120	40	70	..	1,440	1,440	..	..	..
Total Port Curtis..	25,203,258	940,037	..	504,459	23,109,937	648,825	..	..	2,121	5	..	68,205	20,641	4,074	284	10,781,659	367,262	11,148,921	..	..	..
Edgecumbe.																					
Ayr	145,805	2,100	..	97,565	1,300	44,840	..	..	291	..	..	748	591	583	109	..	500	500	..	..	..
Bowen	68,204	24,801	..	21,018	7,790	14,595	..	..	75	..	..	401	379	14	87	..	7,054	7,054	..	..	..
Cape River	2,433	1,373	..	1,060	..	..	..	..	4	..	..	15	17	..	76	..	262	262	..	..	..
Charters Towers ..	72,640	6,030	..	4,105	..	62,505	..	..	23	..	..	397	301	110	104	..	2,380	2,380	..	..	..
Collinsville	7,707	..	..	665	..	7,042	..	..	2	..	..	45	24	8	112	..	..	..	..	..	..
Mackay	1,716,613	215,419	..	412,918	938,229	150,047	..	..	1,190	1	..	6,353	3,972	889	166	461,228	79,371	540,599	..	..	..
Proserpine	183,381	27,170	..	77,691	58,280	20,190	..	..	189	..	..	795	506	31	141	..	12,760	12,760	..	..	..

Table No. III.—*continued.*

RETURN SHOWING THE RESULTS OF THE DAIRYING INDUSTRY IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE DURING THE YEAR 1934—*continued.*

Districts.	Total Milk Obtained.	HOW UTILISED.							ESTABLISHMENTS.			DAIRY CATTLE.			Average per Cow.	BUTTER MADE.			CHEESE MADE.		
		For Butter on Farms.	For Cheese on Farms.	For Domestic Purposes by Producer.	Separated for Sale.	Sold for Consumption as Milk.	Sold to Condensed Milk Factories.	Sold to Cheese Factories.	Dairying.	Butter Factories.	Cheese Factories.	In Milk.	Dry.	Heifers, &c.		At Factories.	By Farmers.	Total.	At Factories.	By Farmers.	Total.
	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	No.	No.	No.	No.	No.	No.	Gall.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
Rockingham.																					
Atherton	9,203,934	153,477	..	113,346	8,628,495	52,370	..	256,246	500	4	2	17,004	5,810	1,670	412	4,756,583	64,960	4,821,543	255,476	..	255,476
Cairns	462,445	5,200	..	69,087	215,600	172,558	..	..	252	..	..	1,102	625	58	268	..	2,250	2,250	..	..	..
Cardwell	28,500	860	..	13,340	..	14,300	..	..	108	..	..	210	143	185	81	..	420	420	..	..	..
Chillagoe	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Herberton	942,668	35,830	..	14,513	877,375	14,950	..	..	85	1	..	2,524	764	155	287	431,680	17,305	448,985	..	..	..
Ingham	574,016	..	..	79,146	466,545	28,325	..	..	205	1	..	585	1,228	28	317	29,793	..	29,793	..	..	..
Innisfail	169,559	200	..	90,678	44,511	28,170	..	..	286	1	..	907	732	49	103	19,343	100	19,443	..	..	..
Mareeba	483,700	13,355	..	13,592	454,193	2,560	..	..	43	..	..	1,016	387	189	345	..	5,977	5,977	..	..	..
Total Rockingham	11,864,822	208,922	..	399,702	10,686,719	313,233	..	256,246	1,479	7	2	23,348	9,189	2,334	365	5,237,399	91,012	5,328,411	255,476	..	255,476
York Peninsula.																					
Coen	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cook	3,860	400	..	560	..	2,900	..	..	2	..	..	31	37	24	57	..	50	50	..	..	..
Douglas	416,085	5,090	..	20,745	387,860	2,390	..	..	82	1	..	892	546	252	289	164,605	2,515	167,120	..	..	..
Somerset	3,702	..	..	52	..	3,650	..	..	1	..	..	15	7	3	168	..	..	..	..	..	..
Total York Peninsula	423,647	5,490	..	21,357	387,860	8,940	..	..	85	1	..	938	590	279	277	164,605	2,565	167,170	..	..	..
Maranoa.																					
Mitchell	42,495	1,460	..	1,260	39,715	60	..	..	7	..	..	163	52	4	198	..	668	668			
Roma	2,411,206	76,009	..	60,687	2,242,518	31,992	..	..	243	1	..	6,584	2,554	178	264	979,336	36,836	1,016,172	..	..	..
Surat	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yeulba	115,281	5,192	..	3,495	105,499	1,095	..	..	18	..	..	451	139	6	195	..	2,596	2,596	..	..	..
Total Maranoa ..	2,568,982	82,661	..	65,442	2,387,732	33,147	..	..	268	1	..	7,198	2,745	188	258	979,336	40,100	1,019,436	..	..	..
Downs.																					
Allora	3,320,889	10,166	..	100,350	3,044,088	2,500	..	163,785	299	1	..	6,299	1,304	272	437	1,641,654	5,068	1,646,722	..	..	..
Chinchilla	4,680,233	69,946	..	55,442	4,544,405	10,440	..	..	205	1	..	9,989	2,299	672	381	2,616,044	35,153	2,651,197	..	..	..
Clifton	5,541,720	162,361	1,500	109,861	4,160,302	36,965	..	1,070,731	489	1	6	9,974	1,499	264	483	2,034,312	69,293	2,103,605	908,684	1,100	909,784
Condamine	4,672,020	56,352	..	44,182	4,568,486	3,000	..	..	204	1	..	8,649	1,932	385	442	1,573,272	28,719	1,601,991	..	..	..
Dalby	12,660,487	185,276	..	131,071	11,463,409	44,618	..	836,113	554	4	3	26,340	5,973	784	392	4,995,575	87,700	5,083,275	558,525	..	558,525
Goondiwindi ..	292,980	11,100	..	9,630	251,200	21,050	..	..	33	1	1	607	264	24	336	218,428	5,550	223,978	80,576	..	80,576
Inglewood	2,257,436	39,791	..	38,345	1,701,993	25,322	..	451,985	130	..	1	4,814	853	115	398	..	18,515	18,515	255,429	..	255,429
Killarney	3,277,915	55,999	..	32,229	2,768,939	3,950	..	416,798	186	1	..	5,596	1,899	134	437	1,636,571	21,068	1,657,639	..	..	..
Oakey	15,638,015	246,349	..	184,099	11,831,082	132,640	..	3,246,645	819	2	20	28,667	4,938	1,260	465	7,646,192	118,945	7,765,137	4,630,319	..	4,630,319
Pittsworth	7,211,417	107,793	..	127,846	3,418,391	12,235	..	3,545,212	481	..	11	13,609	2,035	389	461	..	51,572	51,572	3,414,861	..	3,414,861
Stanthorpe	250,574	104,941	..	82,977	42,156	20,500	..	..	526	..	..	859	288	113	218	..	52,270	52,270	..	..	..
Texas	602,381	14,066	..	13,955	571,936	2,424	..	..	52	1	..	1,640	416	15	293	334,292	5,415	339,707	..	..	..
Toowoomba	7,373,006	186,872	..	154,522	4,588,840	227,831	..	2,414,941	619	1	10	14,377	2,395	516	452	5,996,036	92,402	6,088,438	2,377,400	..	2,377,400
Warwick	5,025,537	184,044	..	162,321	4,670,048	20,490	..	588,634	600	1	4	12,467	2,582	385	374	3,407,867	88,043	3,495,910	520,230	..	520,230
Total Downs ..	73,604,610	1,435,196	1,500	1,243,830	57,625,275	563,965	..	12,734,844	5,197	12	56	143,887	28,677	5,328	427	32,100,243	679,713	32,779,956	12,746,024	1,100	12,747,124
Other Districts ..	235,123	28,784	..	26,877	37,535	141,927	..	..	87	..	..	1,419	1,077	271	94	..	7,767	7,767	..	..	..
Grand Total { 1934	a201,200,744	7,360,134	7,050	6,485,630	264,694,097	9,078,384	12,481	13,562,968	26,102	56	61	729,821	172,932	36,501	334	133,402,841	3,390,829	136,793,670	13,525,380	6,100	13,531,480
Grand Total { 1933	b259,355,247	7,412,289	3,950	6,273,883	223,711,778	8,036,075	..	13,917,272	25,363	56	62	673,544	164,978	38,887	309	110,607,700	3,424,903	114,032,603	13,937,788	3,940	13,941,728
Increase, 1934 ..	41,845,497	..	3,100	211,747	40,982,319	1,042,309	12,481	..	739	..	..	56,277	7,954	..	25	22,795,141	..	22,761,067	..	2,160	..
Decrease, 1934 ..	..	52,155	..	..	..	..	..	354,304	..	..	1	..	..	2,386	..	..	34,074	..	412,408	..	410,248

(*a*) 869,979 gallons of this were sent from Moreton Division to New South Wales.

(*b*) 406,113 gallons of this were sent from Moreton Division to New South Wales.

Table No. IV.

BUTTER AND CHEESE.

RETURN SHOWING QUANTITY EXPORTED OVERSEA FOR FIVE YEARS (AUSTRALIAN PRODUCE ONLY).

Year.	Butter.			Cheese.		
	Quantity Exported Oversea.	Value.	Value per lb.	Quantity Exported Oversea.	Value.	Value per lb.
	Lb.	£	s. d.	Lb.	£	s. d.
1929–30	46,782,074	2,866,517	1 2¾	2,897,481	112,877	0 9½
1930–31	67,582,918	3,326,099	0 11¾	7,790,222	213,731	0 6½
1931–32	72,307,146	3,385,342	0 11¼	4,461,896	117,481	0 6¼
1932–33	76,544,872	2,883,817	0 9½	6,527,007	151,462	0 5½
1933–34	98,084,492	3,259,804	0 8	6,635,988	145,834	0 5¼

POULTRY

Table No. V.

RETURN SHOWING THE NUMBERS OF POULTRY ON FARMS AND EGGS PRODUCED IN THE PRINCIPAL DISTRICTS OF THE STATE FOR THE YEAR 1934.

Petty Sessions District.	Fowls.	Ducks.	Geese.	Turkeys.	Other.	Eggs.	Total Poultry Sold or Killed for Food.		Value of Eggs Sold or Used
	Number.	Number.	Number.	Number.	Number.	Dozen.	Number.	£	£
Allora	12,398	..	..	..	300	55,663	282	33	2,790
Atherton	23,475	714	28	132	10	84,965	6,545	857	4,178
Ayr	11,702	152	6	231	..	43,434	1,100	71	3,396
Beaudesert	19,338	908	83	461	100	78,024	9,808	884	3,547
Biggenden	11,666	224	10	127	..	71,536	2,190	210	3,729
Brisbane (A)	97,908	1,305	106	221	110	1,022,394	65,540	4,608	49,242
Brisbane (B)	71,484	608	4	14	1,382	602,883	27,824	2,786	28,581
Bundaberg	21,057	483	25	56	..	84,363	1,758	200	4,083
Caboolture	16,583	230	5	10	..	135,228	10,801	694	6,830
Cairns	18,641	647	12	11	154	62,756	3,966	509	3,775
Cleveland	27,128	165	3	10	..	580,035	12,148	1,156	29,513
Clifton	17,910	894	31	76	..	81,132	4,784	456	4,128
Condamine	6,322	96	22	357	5	29,860	1,166	137	1,405
Crow's Nest	14,300	96	8	6	1	46,118	3,975	234	1,917
Dalby	16,119	919	53	607	11	63,819	3,204	310	3,278
Dugandan	28,476	2,835	221	169	571	137,621	10,562	951	5,281
Esk	4,977	222	115	91	32	21,569	2,232	240	1,128
Gatton	19,269	2,245	387	421	100	72,621	7,074	938	3,726
Gayndah	15,898	599	83	256	79	49,005	5,821	629	2,506
Gin Gin	6,411	536	6	3	..	30,408	1,015	96	1,517
Gladstone	14,957	192	68	275	3	80,128	2,989	293	3,110
Goodna	1,603	70	2	3	..	24,442	399	53	1,252
Gympie	34,689	3,196	120	302	27	86,704	8,589	814	6,050
Harrisville	19,336	1,149	113	121	100	110,811	4,882	522	4,939
Ingham	14,143	782	17	9	12	42,533	4,138	534	2,947
Innisfail	16,027	629	4	6	..	55,953	4,924	861	3,457
Ipswich	10,927	356	30	63	..	56,150	2,598	225	2,598
Kilcoy	4,702	253	14	8	5	19,583	2,283	195	984
Killarney	9,855	186	26	186	..	94,916	1,527	117	4,559
Laidley	14,068	2,493	671	229	503	77,274	6,093	617	2,645
Logan	20,483	349	43	65	..	115,300	3,475	271	5,863
Lowood	12,530	2,514	389	89	1	42,215	4,691	451	1,732
Mackay	38,404	2,068	55	808	107	176,905	12,768	1,204	7,610
Marburg	12,568	2,215	112	17	..	61,296	5,757	592	2,679
Maroochy	44,688	843	46	187	..	365,391	23,439	1,626	17,082
Maryborough	12,778	276	3	179	102	64,569	3,344	359	3,339
Mount Morgan	14,171	309	23	742	17	58,714	1,432	146	3,091
Nanango	26,571	1,180	139	558	31	128,203	6,617	471	6,743
Oakey { Cooyar ..	5,400	243	128	71	1	28,661	1,649	197	1,441
Oakey { Oakey	26,581	912	237	452	21	170,813	6,369	526	8,536
Pittsworth	13,373	484	40	522	3	88,593	3,460	341	4,611
Proserpine	6,753	456	12	12	10	28,254	130	16	1,434
Redcliffe	14,913	396	12	8	..	79,992	3,615	338	3,999
Rockhampton	33,773	615	32	302	10	202,333	34,823	1,955	9,887
Rosewood	17,714	1,426	125	261	20	84,105	7,677	571	4,835
Southport	15,250	1,139	162	115	3	60,604	4,663	650	3,123
Stanthorpe	13,816	13	12	41	..	83,291	5,106	391	4,297
Tiaro	7,608	279	12	7	8	25,567	1,269	143	1,300
Toogoolawah	10,754	1,227	195	130	34	50,293	2,716	396	2,311
Toowoomba { Helidon ..	5,263	77	21	..	..	12,504	1,248	155	420
Toowoomba { Toow'mba	26,869	450	36	81	308	136,810	7,564	757	6,089
Townsville	9,636	231	10	51	130	73,012	4,802	474	4,308
Warwick	23,907	272	28	581	..	96,056	8,194	744	4,970
Wienholt	32,443	1,927	266	391	32	153,228	5,312	582	7,160
Woodford	5,477	500	58	102	2	19,377	2,210	229	1,022
Wynnum	36,261	614	..	..	..	258,442	49,471	2,852	12,644
All Other Districts ..	70,289	1,901	122	2,143	66	271,059	22,146	2,471	14,875
Totals, 1934 ..	1,159,642	46,100	4,591	12,376	4,411	6,937,515	454,164	39,138	342,492
Totals, 1933 ..	1,041,819	37,230	4,594	10,033	2,942	5,523,784	400,781	36,071	251,387
Increase, 1934 ..	117,823	8,870	..	2,343	1,469	1,413,731	53,383	3,067	91,105
Decrease, 1934 ..	..	..	3	..	..	..	..	..	..

NOTE.—Total value of production of poultry and eggs—1933, £490,064 ; 1934, £516,580. N.B.—Brisbane (B) refers to South Brisbane.

APIARIES.

Table No. VI.

RETURN SHOWING THE PARTICULARS OF THE BEE INDUSTRY FOR THE YEAR 1934.

Petty Sessions District.	Number of Owners.	Number of Hives.		Honey.	Average per Productive Hive.	Wax.
		Productive.	Non-Productive.			
				Lb.	Lb.	Lb.
Allora	1	20	10	780	39	50
Beaudesert	7	8	54	170	21	..
Biggenden	5	77	9	4,000	52	118
Brisbane (A)	13	257	141	6,906	27	80
Brisbane (B)	3	16	10	510	32	..
Bundaberg	9	109	52	2,960	27	20
Caboolture	13	646	139	47,320	73	427
Charters Towers	1	34	..	3,300	97	100
Childers	1	15	..	500	33	..
Chinchilla	13	26	36	1,180	45	..
Cleveland	15	379	193	16,653	44	220
Clifton	1	34	..	3,448	101	13
Cook	2	127	14	6,269	49	230
Dalby	6	676	163	106,278	157	676
Douglas	2	30	18	500	17	100
Dugandan	11	189	53	7,925	42	200
Eidsvold	4	45	18	4,618	103	128
Esk	6	31	34	710	23	12
Gatton	7	156	53	8,433	54	123
Gayndah	7	209	34	8,560	41	100
Gin Gin	5	144	49	8,560	59	150
Gladstone	14	127	14	8,570	67	300
Goodna	3	52	200	3,420	66	10
Gympie	22	936	221	29,514	32	291
Harrisville	16	152	24	4,231	28	30
Herberton	3	162	..	4,916	30	..
Inglewood	11	251	45	27,640	110	250
Ipswich	1	9	5	420	47	4
Kilcoy	3	7	16	160	23	..
Killarney	9	965	209	59,245	61	482
Laidley	7	117	46	3,980	34	60
Logan	29	354	83	14,940	42	553
Loowood	2	10	5	557	56	..
Mackay	6	72	47	2,850	40	154
Marburg	13	42	31	1,200	29	..
Maroochy	29	469	111	12,710	27	249
Maryborough	45	1,214	243	75,818	62	1,747
Mount Morgan	6	45	4	1,132	25	..
Nanango	5	56	43	2,014	36	10
Oakey — Cooyar	9	4	15	240	60	10
Oakey — Oakey	9	47	46	2,257	48	10
Redcliffe	11	151	84	4,540	30	46
Rockhampton	32	1,436	330	85,793	60	1,314
Rosewood	22	206	67	12,300	60	165
Southport	13	255	65	13,952	55	196
Stanthorpe	17	165	17	7,205	44	180
Tiaro	3	30	5	3,400	113	..
Toogoolawah	8	12	47	470	39	18
Toowoomba — Helidon	2	12	23	300	25	..
Toowoomba — Toowoomba	13	122	28	4,281	35	115
Townsville	8	27	46	580	21	30
Warwick	23	995	295	110,832	111	682
Wienholt	3	15	8	690	46	..
Woodford	23	356	78	18,380	52	70
Wynnum	3	62	21	2,050	33	7
All Other Districts	14	45	31	1,042	23	15
Totals, 1934	569	12,208	3,633	761,209	62	9,745
Totals, 1933	553	10,955	3,394	610,330	56	8,727
Increase, 1934	16	1,253	239	150,879	6	1,018
Decrease, 1934	..	..	..	..	..	..

NOTE.—Total value of honey and wax—1933, £10,703; 1934, £12,458. N.B.—Brisbane (B) refers to South Brisbane.

HOLDINGS, CULTIVATION, ETC.

Table No. VII.

RETURN SHOWING PROGRESS OF HOLDINGS AND AREA CULTIVATED.—RETURN FOR 10 YEARS.

Year.	Number of Holdings Returned. †	Increase per cent. on Previous Year.	Increase per cent. on Figures of 1904.	Area under Cultivation.	Increase per cent. on Previous Year.	Increase per cent. on Figures for 1904.
1904	17,854	..	..	577,896	..	..
1925	33,533	3·63	87·82	1,241,118	—2·66	114·76
1926	32,051	—4·42	79·52	1,288,518	3·82	122,97
1927	30,414	—5·11	70·35	1,295,992	0·58	124·26
1928	30,586	0·57	71·31	1,268,475	—2·12	119,51
1929	30,701	0·38	71·95	1,269,242	0·06	119·63
1930	30,790	0·29	72·45	1,331,513	4·91	130·41
1931	31,450	2·14	76·15	1,401,932	5·29	142·59
1932	31,996	1·74	79·21	1,426,648	1·76	146·87
1933	32,041	0·14	79·46	1,499,996	5·14	159·56
1934	32,935	2·79	84·47	1,512,591	0·84	161·74

The minus sign (—) implies a decrease. † Includes some dairying holdings without cultivation.

Table No. VIII.

SHOWING CLASSIFICATION OF HOLDINGS, COMPRISING FREEHOLD LAND USED FOR AGRICULTURAL AND/OR DAIRYING PURPOSES, IN THE VARIOUS DIVISIONS OF QUEENSLAND.

Divisions.	1 and under 50.	50 and under 100.	100 and under 500.	500 and under 1,000.	1,000 and under 5,000.	5,000 and under 10,000.	10,000 and under 20,000.	20,000 and under 50,000.	50,000 and over.	Total.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Moreton	2,376	1,747	4,717	637	215	2	1	..	..	9,695
Wide Bay	763	795	4,455	734	308	4	3	1	..	7,063
Port Curtis	502	142	960	400	311	14	3	..	2	2,334
Edgecumbe	474	487	1,904	187	49	4	..	..	..	3,105
Rockingham	380	823	1,560	60	10	3	..	..	..	2,836
Yorke Peninsula ..	44	66	118	9	1	..	..	..	..	238
Carpentaria	31	1	4	3	4	..	..	..	..	43
Central Western ..	10	..	2	..	1	..	..	..	..	13
South-Western ..	30	2	4	2	1	1	..	..	..	40
Central	21	..	13	7	26	3	1	2	..	73
Maronoa	8	8	68	56	155	24	5	..	..	324
Downs	578	496	2,983	975	619	23	2	..	..	5,676
Total No. of Holdings	5,217	4,567	16,788	3,070	1,700	78	15	3	2	31,440
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Moreton	49,019	132,154	1,049,946	436,320	339,995	12,000	16,000	..	..	2,035,434
Wide Bay	20,385	58,138	1,059,514	498,931	474,091	25,620	41,810	21,093	..	2,199,582
Port Curtis	9,680	10,007	256,380	278,475	561,261	99,682	36,300	..	123,800	1,375,585
Edgecumbe	10,952	36,115	381,977	126,007	85,319	30,323	..	..	..	670,693
Rockingham	10,766	61,308	276,965	40,902	20,569	17,460	..	..	..	427,970
York Peninsula ..	1,109	5,105	24,310	5,689	1,500	..	..	..	..	37,713
Carpentaria	243	88	960	2,300	13,793	..	..	..	..	17,384
Central-Western ..	35	..	320	..	2,010	..	..	..	..	2,365
South-Western ..	164	169	725	1,684	1,800	5,535	..	..	..	10,077
Central	220	..	3,550	4,765	57,361	19,380	16,277	47,000	..	148,553
Maranoa	111	613	22,141	39,450	314,336	155,933	65,200	..	..	597,784
Downs	15,453	35,884	778,813	671,010	1,101,430	160,036	24,143	..	..	2,786,769
Total Area of Holdings	118,137	339,581	3,855,601	2,105,533	2,973,465	525,969	199,730	68,093	123,800	10,309,909

NOTE.—The above figures include only those holdings engaged in Agriculture and/or Dairying, purely Pastoral Holdings not being covered.

Table No. IX.

SHOWING CLASSIFICATION OF HOLDINGS, COMPRISING FREEHOLD, LEASED, AND CROWN LAND, USED FOR AGRICULTURAL AND/OR DAIRYING PURPOSES, IN THE VARIOUS DIVISIONS OF QUEENSLAND.

Divisions.	1 and under 50.	50 and under 100.	100 and under 500.	500 and under 1,000.	1,000 and under 5,000.	5,000 and under 10,000.	10,000 and under 20,000.	20,000 and under 50,000.	50,000 and over.	Total.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Moreton	2,385	1,739	4,716	660	225	3	2	..	..	9,730
Wide Bay	766	795	4,535	811	391	9	4	1	..	7,312
Port Curtis	513	148	1,224	575	426	24	12	2	3	2,927
Edgecumbe	506	495	1,984	210	62	5	..	..	..	3,262
Rockingham	399	835	1,743	73	11	3	..	..	..	3,064
York Peninsula ..	44	69	122	9	2	..	1	..	..	247
Carpentaria	36	1	4	3	4	1	..	..	1	50
Central-Western ..	10	..	2	..	1	..	..	..	..	13
South-Western ..	36	2	4	1	2	1	..	..	2	48
Central	27	1	13	11	28	3	1	2	..	86
Maranoa	8	7	55	54	184	26	5	2	..	341
Downs	574	529	2,970	1,040	700	36	5	1	..	5,855
Total No. of Holdings	5,304	4,621	17,372	3,447	2,036	111	30	8	6	32,935
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Moreton	49,351	131,612	1,050,618	452,500	356,267	19,938	31,000	..	..	2,091,286
Wide Bay	20,423	58,242	1,086,765	561,352	633,246	59,549	57,199	21,093	..	2,497,869
Port Curtis	10,025	10,929	341,254	402,285	785,244	158,824	164,325	70,000	183,350	2,126,236
Edgecumbe	11,565	36,817	402,505	141,691	110,474	36,023	..	..	..	739,075
Rockingham	11,122	62,296	313,762	48,382	21,839	17,460	..	..	..	474,861
York Peninsula ..	1,134	5,302	24,994	5,708	3,500	..	13,970	..	..	54,608
Carpentaria	295	88	960	2,300	14,433	6,400	..	..	179,840	204,316
Central-Western ..	35	..	320	..	2,010	..	..	..	..	2,365
South-Western ..	188	169	725	700	3,412	5,535	..	..	1,388,560	1,399,289
Central	253	80	3,687	7,428	63,717	19,380	16,277	47,000	..	157,822
Maranoa	120	533	17,839	38,037	393,304	170,169	66,600	54,000	..	740,602
Downs	15,348	41,274	779,773	717,721	1,279,794	248,453	62,733	24,000	..	3,169,096
Total Area of Holdings	119,859	347,342	4,023,202	2,378,104	3,667,240	741,731	412,104	216,093	1,751,750	13,657,425

NOTE.—The above figures include only those holdings engaged in Agriculture and/or Dairying, purely Pastoral Holdings not being covered.

Table No. X.

RETURN SHOWING NUMBER OF FARMS GROUPED ACCORDING TO AREA UNDER CULTIVATION FOR THE YEAR 1934.

Petty Sessions District.	Under 5 Acres.		5 and under 20 Acres.		20 and under 50 Acres.		50 Acres and Over.		Totals.	
	No. of Farms.	Acres.	No. of Farms.	Acres.	No. of Farms.	Acres.	No. of Farms.	Acres.	No. of Farms.	Acres.
Allora	1	2	4	64	15	505	298	47,612	318	48,183
Atherton	38	95	91	981	70	2,275	160	15,375	359	18,726
Ayr	6	20	35	411	161	5,919	429	35,972	631	42,322
Banana	3	10	13	144	25	783	33	3,280	74	4,217
Beaudesert	33	96	227	2,606	234	6,930	71	4,794	565	14,426
Biggenden	44	117	144	1,471	85	2,370	11	691	284	4,649
Bowen	17	53	140	1,692	53	1,568	9	568	219	3,881
Brisbane (A)	187	466	407	4,296	66	1,727	2	238	662	6,727
Brisbane (B)	95	220	116	1,206	15	433	3	180	229	2,039
Bundaberg	73	203	313	3,739	478	14,961	148	18,266	1,012	37,169
Caboolture	78	216	104	830	13	404	..	..	195	1,450
Cairns	23	58	87	1,070	190	6,496	350	35,050	650	42,674
Cardwell	15	46	34	393	104	4,031	115	7,786	268	12,256
Childers	9	26	40	489	64	2,274	113	13,062	226	15,851
Chinchilla	10	26	30	315	33	978	28	2,369	101	3,688
Cleveland	49	154	243	2,530	21	542	..	..	313	3,226
Clifton	2	7	7	99	16	610	514	97,894	539	98,610
Condamine	5	13	32	354	32	939	32	3,765	101	5,071
Crow's Nest	2	4	57	725	155	5,254	167	14,730	381	20,713
Dalby	2	6	57	630	117	3,830	252	37,548	428	42,014
Douglas	4	15	39	500	76	2,659	78	7,502	197	10,676
Dugandan	12	32	88	1,105	321	10,980	139	9,606	560	21,723
Eidsvold	6	15	42	467	63	2,110	47	4,025	158	6,617
Esk	10	28	45	558	48	1,545	30	2,174	133	4,305
Gatton	1	2	54	749	237	8,056	191	14,296	483	23,103
Gayndah	25	62	135	1,615	226	7,590	147	12,530	533	21,797
Gin Gin	20	44	67	847	106	3,551	96	7,716	289	12,158
Gladstone	99	253	193	1,963	48	1,357	13	997	353	4,570
Goodna	5	14	20	206	3	78	1	156	29	454
Gympie	441	1,076	534	5,197	128	3,613	17	1,105	1,120	10,991
Harrisville	6	17	57	782	208	7,138	121	9,530	392	17,467
Ingham	7	19	62	736	133	4,503	301	27,160	503	32,418
Inglewood	..	..	12	157	36	1,267	69	8,016	117	9,440
Innisfail	1	1	24	334	253	9,114	341	27,495	619	36,944
Ipswich	14	34	71	828	58	1,593	22	1,495	165	3,950
Kilcoy	20	57	60	640	61	1,894	13	1,022	154	3,613
Killarney	7	19	17	172	39	1,328	138	17,966	201	19,485
Laidley	3	8	37	496	195	6,859	203	15,333	438	22,696
Logan	57	165	313	3,699	79	1,958	2	168	451	5,990
Lowood	..	..	10	154	178	5,956	109	7,443	297	13,553
Mackay	45	130	172	2,149	622	21,779	879	81,748	1,718	105,806
Marburg	3	10	38	493	153	5,389	45	2,910	239	8,802
Mareeba	63	179	155	1,486	32	930	3	159	253	2,754
Maroochy	250	900	698	6,629	136	3,750	15	900	1,099	12,179
Maryborough	65	196	277	3,148	148	4,137	18	1,110	508	8,591
Mitchell	..	..	2	17	4	117	18	2,033	24	2,167
Monto	13	40	98	1,115	167	5,496	151	13,189	429	19,840
Mount Morgan	28	76	236	2,662	365	11,635	362	37,612	991	51,985
Nanango	18	54	106	1,259	247	8,516	457	44,606	828	54,435
Oakey — Cooyar	4	10	15	175	51	1,617	53	3,786	123	5,588
Oakey — Oakey	10	32	30	375	143	4,985	624	104,017	807	109,409
Pittsworth	..	..	9	111	46	1,593	478	106,976	533	108,680
Proserpine	2	7	68	881	182	5,978	114	8,980	366	15,846
Redcliffe	55	162	181	2,024	51	1,388	3	178	290	3,752
Rockhampton	200	502	311	3,166	107	3,025	22	1,750	640	8,443
Roma	13	34	41	492	52	1,716	138	24,889	244	27,131
Rosewood	5	16	56	749	184	5,914	90	6,197	335	12,876
Southport	149	375	253	2,426	59	1,684	9	655	470	5,140
Stanthorpe	37	121	456	5,525	264	7,109	16	1,199	773	13,954
Texas	5	17	27	315	18	605	13	1,345	63	2,282
Tiaro	56	138	127	1,383	77	2,300	15	1,047	275	4,868
Toogoolawah	8	21	57	683	124	4,305	93	7,772	282	12,781
Toowoomba — Helidon	2	8	25	350	135	4,506	31	2,075	193	6,939
Toowoomba — Toowoomba	34	93	123	1,425	145	4,708	366	50,197	668	56,423
Warwick	9	31	64	758	102	3,415	450	67,784	625	71,988
Wienholt	13	37	132	1,658	425	14,587	500	42,328	1,070	58,610
Woodford	69	162	127	1,255	30	799	2	116	228	2,332
Wynnum	20	40	49	561	8	217	..	..	77	818
All Other Districts	193	470	235	2,263	84	2,394	33	3,203	545	8,330
Totals, 1934	2,799	7,560	8,229	90,783	8,604	280,572	9,811	1,133,676	29,443	1,512,591
Totals, 1933	2,859	7,990	8,162	93,448	8,402	278,554	9,869	1,120,004	29,292	1,499,996
Increase, 1934	..	..	67	..	202	2,018	..	13,672	151	12,595
Decrease, 1934	60	430	..	2,665	..	..	58	..	..	..

NOTE.—The number of farms shown above does not agree with number of holdings in Table No. VII., as there are some holdings devoted only to dairying, with no cultivation on them.

Table No. XI.

RETURN SHOWING LAND TREATED FOR CULTIVATION, ETC., FOR THE YEARS 1933 AND 1934.

	1933.	1934.
	Acres.	Acres.
Under crop	1,313,438	1,296,619
In fallow	68,482	72,089
Previously cropped but not during 1933 and 1934 respectively	118,076	143,883
Under cultivation	1,499,996	1,512,591
Under permanent artificially sown grasses	777,706	869,777
New ground cleared during the year but not ploughed	6,153	4,643
Grand total	2,283,855	2,387,011

Table No. XII.

RETURN SHOWING THE ACREAGE AND VALUE OF AGRICULTURAL CROPS FOR THE YEARS 1933 AND 1934.

	1933.		1934.	
	Acres	Value.	Acres.	Value.
		£		£
Grain crops	413,020	1,466,964	396,581	1,379,186
Green forage	311,462	622,924	338,312	676,624
Hay and straw	92,943	610,008	86,477	615,985
Root crops	15,653	169,426	15,726	245,444
Sugar-cane	311,910	7,247,122	303,926	6,934,764
Fruit	33,413	1,113,360	32,441	948,095
All other	135,037	1,073,467	123,156	1,105,708
Total	1,313,438	12,303,271	1,296,619	11,905,806

Table No. XIII.

RETURN SHOWING THE AREA IRRIGATED AND THE PRINCIPAL CROPS TREATED FOR THE YEAR 1934.

Petty Sessions District.	Number of Irrigators.	Acres Irrigated.	*Cost of Power, Water, &c., Used.	Original Source of Water Supply.	Means Employed for Procurement and Utilisation.	Principal Crops Treated.
			£			
Ayr	558	22,005	76,741	Spears and wells	Drains and fluming	Cane
Banana	58	1,692	2,523	River	Gravitation and canal system	Cotton and miscellaneous crops
Bowen	104	777	2,078	Wells and creeks	Oil and petrol engines, drains	Vegetables
Brisbane (A)	22	97	3,362	Rivers, wells, and creeks	Oil and petrol engines, pipes and sprays	Vegetables and lucerne
Brisbane (B)	32	165	2,173	Springs and bores	Oil and petrol engines, flooding and sprays	Fruit and vegetables
Bundaberg	11	4,252	11,426	Wells and rivers	Oil and steam engines	Cane
Cape River	8	46	145	River and wells	Oil engines, windmills and trenches	Fruit and vegetables
Charters Towers	39	142	1,062	River and wells	Oil engine, windmills, pipes, and drains	Lucerne, tobacco, maize, and fruit
Cleveland	145	654	3,680	Creeks and wells	Oil engine, pipes, and sprays	Fruit and vegetables
Dugandan	29	186	2,076	Creeks	Flooding	Vegetables
Emerald	5	98	96	Wells	Oil engine and pipes	Vegetables
Gatton	37	427	3,259	Creeks and wells	Oil engines, tractor sprays, and flooding	Miscellaneous crops and vegetables
Gayndah	10	99	4,110	River	Oil engine and pipes	Fruit
Gladstone	7	114	849	Well	Steam, oil suction gas, spraying, and flooding	Lucerne, vegetables
Goondiwindi	2	43	..	River	Steam and oil engines, drains	Fruit
Harrisville	5	60	1,687	Creek	Oil engine and spray	Grain crops and vegetables
Inglewood	11	375	1,198	River	Engine drains	Tobacco
Killarney	7	38	1,445	River	Oil engines, electricity, drains, trenches, and sprays	Lucerne and vegetables
Laidley	11	218	2,906	Bore	Oil engine and spray	Lucerne and potatoes
Logan	14	79	530	Well, creek, dam, and bore	Oil, Diesel, petrol and kerosene engine, and sprays	Vegetables
Mackay	11	598	25,638	Creeks	Oil engines	Cane
Maroochy	8	58	2,456	Well, creek	Oil engine, gravitation, and spray	Fruit and grass
Mount Morgan	10	43	413	Well	Spray	Fruit and vegetables
Rockhampton	88	572	3,159	Creeks, wells, river, and bores	Oil engines, windmills, drains, and furrows	Fruit and vegetables
Stanthorpe	10	99	269	Creeks and wells	Oil engines and pipes	Fruit, vegetables, and tobacco
Texas	24	333	557	River	Oil engine	Tobacco
Toowoomba	20	88	3,914	Mill and town supply	Oil engine, windmill, and pipes	Fruit and vegetables
Townsville	15	280	710	Rivers and wells	Oil engines, windmills, drains, and furrows	Cane, fruit, and vegetables
Wynnum	11	39	879	Main, well	Petrol engine, electricity, pipes, and spray	Fruit
All Other Districts	130	551	240,317	Various	Various	Various
Total State	1,442	34,138	399,658			

Sugar-cane, 26,737 acres; Cotton, 1,570 acres; Tobacco, 737 acres; Green Fodder, 688 acres; Fruit and Vegetables, 2,791 acres; Miscellaneous Crops, 1,615 acres. N.B.—Brisbane (B) refers to South Brisbane. * Exclusive of Value of Machinery shown in Table XV.

Table No. XIV.

IRRIGATION.—RETURN FOR 10 YEARS.

Year.	Acres Irrigated.	Year.	Acres Irrigated.
1925	21,669	1930	26,947
1926	24,250	1931	28,414
1927	21,411	1932	31,409
1928	25,344	1933	29,363
1929	26,282	1934	34,138

Table No. XV.

RETURN SHOWING LABOUR EMPLOYED, INCLUDING OWNERS OR OCCUPIERS WORKING ON HOLDINGS, AND THE CAPITAL INVESTED IN FARMING MACHINERY, ETC., 1934.

PETTY SESSIONS DISTRICT.	LABOUR.				VALUE OF MACHINERY AND IMPLEMENTS.				
	Farming Principally.		Dairying Principally.		Farming.	Dairying.	Irrigation.	Travelling Machinery.	Total.
	Males.	Females.	Males.	Females.	£	£	£	£	£
Allora	471	27	415	277	128,560	9,455	1,000	450	139,465
Atherton	500	16	762	482	52,024	29,156	1,155	4,000	86,335
Ayr	1,797	5	7	1	173,598	65	448,677	116,418	738,758
Beaudesert	40	8	694	653	50,577	53,587	565	445	105,174
Biggenden	166	5	632	410	16,730	25,994	..	5,665	48,389
Bowen	321	24	42	11	12,181	717	18,819	9,189	40,906
Brisbane (A)	1,017	126	732	255	29,212	10,187	4,697	17,172	61,268
Brisbane (B)	318	34	273	95	9,517	4,893	6,555	5,815	26,780
Bundaberg	1,913	18	402	339	132,080	16,537	66,649	58,129	273,395
Caboolture	219	15	128	77	5,187	4,856	262	2,290	12,595
Cairns	1,971	23	38	12	177,727	1,030	30	123,464	302,251
Cardwell	812	1	6	..	38,817	175	190	38,260	77,442
Childers	517	12	46	20	41,979	3,917	121	16,730	62,747
Cleveland	496	45	21	31	9,813	760	31,457	10,518	52,548
Clifton	745	21	477	433	190,459	19,758	25	52,903	263,145
Crow's Nest	696	2	664	424	31,618	27,595	145	300	59,658
Dalby	868	41	1,092	509	89,047	57,760	350	6,888	154,045
Douglas	356	1	42	15	62,754	1,311	..	2,907	66,972
Dugandan	923	20	736	660	64,813	18,287	2,906	6,637	92,643
Esk	219	50	245	180	10,750	6,332	765	1,110	18,957
Gatton	748	16	601	478	66,793	12,750	7,405	11,211	98,159
Gayndah	606	32	1,034	478	56,692	39,137	2,335	1,940	100,014
Gin Gin	411	1	134	179	32,842	5,380	200	10,546	48,968
Gladstone	545	33	719	383	23,952	28,645	1,620	2,415	56,632
Goodna	49	1	47	22	1,216	748	130	80	2,174
Gympie	1,595	20	2,369	1,624	39,103	71,174	328	6,023	116,628
Harrisville	508	11	672	437	56,984	13,444	1,322	7,373	79,123
Ingham	1,150	4	..	..	104,365	70	50	79,624	184,109
Innisfail	1,660	8	26	2	280,135	286	..	63,602	344,023
Ipswich	286	5	303	171	10,606	4,819	740	960	17,125
Kilcoy	267	54	311	193	9,975	9,358	80	286	19,699
Killarney	423	14	394	105	63,895	11,048	870	4,775	80,588
Laidley	794	26	546	482	69,793	12,697	2,584	2,035	87,109
Logan	754	49	689	403	19,758	8,993	1,980	1,051	31,782
Lowood	485	6	26	417	36,917	8,450	580	4,804	50,751
Mackay	3,598	265	136	87	352,615	5,954	4,072	124,447	487,088
Marburg	254	..	397	229	20,239	5,826	..	100	26,165
Maroochy	1,546	66	897	472	36,664	30,720	333	16,614	84,331
Maryborough	734	45	410	316	37,941	8,410	10	11,627	57,988
Monto	671	33	609	353	27,339	18,910	480	7,776	54,505
Mount Morgan	1,332	83	757	451	52,699	22,401	7,205	11,752	94,057
Nanango	1,152	114	1,354	607	115,556	73,354	792	5,966	195,668
Oakey — Cooyar	94	..	179	142	7,452	8,567	..	2,430	18,449
Oakey — Oakey	1,171	22	1,219	1,002	191,682	64,961	..	49,471	306,114
Pittsworth	613	44	472	268	166,147	31,507	..	54,502	252,156
Proserpine	656	31	12	6	75,320	1,738	295	23,219	100,572
Redcliffe	396	25	590	316	14,908	13,552	860	7,571	36,891
Rockhampton	847	106	794	475	37,310	24,335	12,884	14,207	88,736
Roma	339	31	312	199	40,329	11,396	40	3,848	55,613
Rosewood	536	10	512	462	34,599	12,718	480	1,968	49,765
Southport	545	22	918	506	20,108	26,502	635	8,705	55,950
Stanthorpe	1,155	108	54	14	53,143	509	1,645	1,992	57,289
Tiaro	338	8	482	317	26,467	16,496	..	510	43,473
Toogoolawah	400	7	262	367	32,292	29,527	250	..	62,069
Toowoomba — Helidon	367	1	361	221	10,131	7,398	..	100	17,629
Toowoomba — Toowoomba	945	40	765	529	100,297	31,846	2,144	16,302	150,589
Warwick	993	23	871	411	139,587	21,740	770	11,915	174,012
Wienholt	1,558	28	1,792	1,074	147,613	85,076	88	11,392	244,169
Woodford	293	1	495	282	6,075	17,647	190	4,740	28,652
Wynnum	99	22	73	31	3,577	1,064	1,627	1,373	7,641
All Other Districts	1,964	246	2,084	1,098	104,826	73,653	25,757	16,106	220,342
Totals, 1934	47,242	2,155	32,132	20,493	4,0[illegible].385	1,165,178	665,149	1,084,648	6,970,360
Totals, 1933	46,097	2,438	29,808	19,539	3,9[illegible],149	1,122,235	648,998	959,699	6,696,081
Increase, 1934	1,145	..	2,324	954	90,236	42,943	16,151	124,949	274,279
Decrease, 1934	..	283	..	..	..	..	..	..	..

N.B.—Brisbane (B) refers to South Brisbane.

Table No. XVI.

WHEAT (GRAIN).

RETURN FOR TEN YEARS SHOWING THE AREA AND PRODUCE OF WHEAT FOR GRAIN.

Year.	Area.	Produce.	Average per Acre.	INCREASE OR — DECREASE ON THE PREVIOUS YEAR.		
				Area.	Produce.	Average per Acre.
	Acres.	Bushels.	Bushels.	Acres.	Bushels.	Bushels.
1925	165,999	1,973,477	11·89	— 23,146	— 806,352	— 2·81
1926	57,084	379,339	6·65	—108,915	—1,594,138	— 5·24
1927	215,073	3,783,584	17·59	157,989	3,404,245	10·94
1928	218,069	2,515,561	11·54	2,996	—1,268,023	— 6·05
1929	204,116	4,235,172	20·75	— 13,953	1,719,611	9·21
1930	272,316	5,107,561	18·76	68,200	872,389	— 1·99
1931	248,783	3,863,894	15·53	— 23,533	—1,243,667	— 3·23
1932	250,049	2,493,902	9·97	1,306	—1,369,992	— 5·56
1933	232,053	4,361,614	18·80	— 17,996	1,867,712	8·83
1934	221,729	4,076,181	18·38	— 10,324	— 285,433	— 0·42
Average of Ten Years	208,527	3,279,028	15·72	..	..	..

Table No. XVII.

WHEAT.

RETURN FOR TEN YEARS SHOWING AVERAGE YIELD PER ACRE IN EACH STATE.

States.	Average Produce per Acre—Bushels.										
	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	Mean for 10 Years ending 1934.
Queensland	11·89	6·65	17·59	11·54	20·75	18·76	15·53	9·97	18·80	18·38	14·99
New South Wales	11·56	14·13	8·92	12·04	8·66	12·83	14·92	16·42	12·45	12·73	12·47
Victoria	11·64	16·08	8·54	12·59	7·13	11·70	11·77	14·81	13·96	10·51	11·87
South Australia	11·60	12·84	8·18	7·79	6·40	8·34	11·81	10·43	9·26	9·02	9·57
Western Australia	9·69	11·68	12·13	10·10	10·95	13·53	13·14	12·33	11·72	9·87	10·61
Tasmania	20·72	23·15	26·25	20·17	22·37	20·49	15·61	20·64	23·27	20·00	21·27

Table No. XVIII.

RETURN SHOWING THE QUANTITY OF WHEAT TREATED IN QUEENSLAND DURING THE YEAR 1933–34.

District.	Number of Establishments.	Number of Hands Employed.	Pairs of Stones.	Sets of Rollers.	Wheat Treated.	FLOUR MADE.		MEAL MADE.		BRAN AND POLLARD.	
						Tons.	Value.	Tons.	Value.	Bushels.	Value.
			Pairs.	Sets.	Bushels.		£		£		£
Metropolitan } 1933-34 ..	10	359	..	163	4,039,643	84,159	734,470	2,011	17,589	3,509,603	178,676
Elsewhere }											
Total, 1932-33 ..	10	366	..	163	4,383,975	91,498	945,123	2,055	20,574	3,605,130	210,743

Table No. XIX.

WHEAT.

RETURN FOR TWO YEARS SHOWING THE AREA AND PRODUCE OF WHEAT FOR GRAIN IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE.

Divisions and Petty Sessions Districts.	1933.			1934.				Increase or Decrease.		
	Area.	Produce.	Average per Acre.	No. of Growers.	Area.	Produce.	Average per Acre.	Area.	Produce.	Average per Acre.
	Acres.	Bushels.	Bushels.		Acres.	Bushels.	Bushels.	Acres.	Bushels.	Bushels.
MORETON.										
Crow's Nest	209	3,491	16·70	18	232	3,479	15·00	23	— 12	— 1·70
Dugandan	25	150	6·00	2	26	216	8·31	1	66	2·31
Gatton	50	414	8·28	1	60	1,440	24·00	10	1,026	15·72
Laidley	..	..	..	1	27	360	13·33	27	360	13·33
Southport	..	..	..	1	4	60	15·00	4	60	15·00
Oakey-Cooyar	41	582	14·20	4	49	774	15·80	8	192	1·60
Total, Moreton	325	4,637	14·27	27	398	6,329	15·90	73	1,692	1·63
WIDE BAY.										
Gayndah	35	100	2·86	2	107	410	3·83	72	310	0·97
Gympie	7	60	8·57	..	..	..	..	— 7	— 60	— 8·57
Nanango	194	1,847	9·52	8	146	2,003	13·72	— 48	156	4·20
Wienholt	152	2,396	15·76	10	369	4,035	10·93	217	1,639	— 4·83
Total, Wide Bay	388	4,403	11·35	20	622	6,448	10·37	234	2,045	— 0·98
PORT CURTIS.										
Banana	240	3,720	15·50	4	325	3,650	11·23	85	— 70	— 4·27
Mount Morgan	340	6,210	18·26	3	340	2,388	7·02	..	— 3,822	— 11·24
Rockhampton	2	35	17·50	..	..	..	..	— 2	— 35	— 17·50
Total, Port Curtis	582	9,965	17·12	7	665	6,038	9·08	83	— 3,927	— 8·04
EDGECUMBE.										
Townsville	..	..	..	1	1	20	20·00	1	20	20·00
MARANOA.										
Mitchell	1,280	22,154	17·31	6	2,039	10,771	5·28	759	— 11,383	— 12·03
Roma	18,685	386,147	20·67	104	17,104	179,066	10·47	— 1,581	— 207,081	— 10·20
Total, Maranoa	19,965	408,301	20·45	110	19,143	189,837	9·92	— 822	— 218,464	— 10·53
DOWNS.										
Allora	21,891	423,027	19·32	273	20,133	407,086	20·22	— 1,758	— 15,941	0·90
Chinchilla	181	2,900	16·02	5	193	2,780	14·40	12	— 120	— 1·62
Clifton	36,671	698,712	19·05	400	34,043	618,769	18·80	— 2,628	— 79,943	— 0·25
Condamine	764	13,076	17·12	5	587	8,980	15·30	— 177	— 4,096	— 1·82
Dalby	12,484	244,713	19·60	129	14,941	278,541	18·64	2,457	33,828	— 0·96
Goondiwindi	136	1,848	13·59	3	70	690	9·86	— 66	— 1,158	— 3·73
Inglewood	1,911	19,264	10·08	38	1,318	24,592	18·66	— 593	5,328	8·58
Killarney	6,250	105,980	16·96	93	5,848	109,473	18·72	— 402	3,493	1·76
Oakey	41,733	790,758	18·95	353	38,235	784,398	20·52	— 3,498	— 6,360	1·57
Pittsworth	56,949	1,007,784	17·70	396	56,233	1,054,941	18·76	— 716	47,157	1·06
Texas	261	6,909	26·47	7	261	1,916	7.34	..	— 4,993	— 19·13
Toowoomba	9,297	185,317	19·93	168	10,713	208,637	19·48	1,416	23,320	— 0·45
Warwick	22,265	434,020	19·49	265	18,325	366,706	20·01	— 3,940	— 67,314	0·52
Total, Downs	210,793	3,934,308	18·66	2,135	200,900	3,867,509	19·25	— 9,893	— 66,799	0·59
Total, State	*232,053	4,361,614	18·80	2,300	†221,729	4,076,181	18·38	— 10,324	— 285,433	— 0·42

* Including 16,539 acres which failed to bear a crop.
† Including 21,563 acres which failed to bear a crop.

TABLE No. XX.

MAIZE.

RETURN FOR TWO YEARS SHOWING THE AREA AND PRODUCE OF MAIZE FOR GRAIN IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE.

Divisions and Petty Sessions Districts.	1933.				1934.				INCREASE OR DECREASE—		
	No. of Growers.	Area.	Produce.	Average per Acre.	No. of Growers.	Area.	Produce.	Average per Acre.	Area.	Produce	Average per Acre.
MORETON.		Acres.	Bushels.	Bushels.		Acres.	Bushels.	Bushels.	Acres.	Bushels.	Bushels.
Brisbane (A)	46	105	2,435	23·19	25	54	1,396	25·85	– 51	– 1,039	2·66
Brisbane (B)	6	16	411	25·69	3	9	276	30·67	– 7	– 135	4·98
Beaudesert	430	3,535	91,696	25·94	468	3,972	111,936	28·18	437	20,240	2·24
Caboolture	9	34	926	27·24	8	18	460	25·56	– 16	– 466	– 1·68
Cleveland	4	3	81	27·00	3	6	186	31·00	3	105	4·00
Crow's Nest	375	5,984	131,703	22·01	358	5,533	159,141	28·76	– 451	27,438	6·75
Dugandan	562	7,433	129,162	17·38	521	6,852	176,484	25·76	– 581	47,322	8·38
Esk	94	866	13,196	15·24	99	908	20,866	22·98	42	7,670	7·74
Gatton	471	6,405	106,487	16·63	429	5,601	150,602	26·89	– 804	44,115	10·26
Goodna	6	61	1,030	16·89	13	97	2,893	29·82	36	1,863	12·93
Harrisville	339	3,584	52,261	14·58	355	3,593	86,768	24·15	9	34,507	9·57
Ipswich	95	572	9,684	16·93	126	737	17,525	23·78	165	7,841	6·85
Kilcoy	66	485	8,506	17·54	120	831	21,811	26·25	346	13,305	8·71
Laidley	368	6,473	104,988	16·22	403	6,491	171,392	26·40	18	66,404	10·18
Logan	239	550	16,771	30·49	201	473	11,036	23·33	– 77	– 5,735	– 7·16
Loowood	271	4,194	64,891	15·47	288	4,512	102,170	22·64	318	37,279	7·17
Marburg	219	1,708	29,750	17·42	233	2,470	48,350	19·57	762	18,600	2·15
Maroochy	103	286	5,554	19·42	81	176	4,218	23·97	– 110	– 1,336	4·55
Redcliffe	63	246	5,428	22·07	43	161	6,359	39·50	– 85	931	17·43
Rosewood	264	2,523	31,626	12·54	288	2,633	46,568	17·69	110	14,942	5·15
Southport	99	375	11,909	31·76	125	366	10,846	29·63	– 9	– 1,063	– 2·13
Toogoolawah	213	2,471	43,580	17·64	256	3,277	92,158	28·12	806	48,578	10·48
Woodford	95	375	7,553	20·14	109	489	9,759	19·96	114	2,206	– 0·18
Wynnum	4	4	62	15·50	2	2	50	25·00	– 2	– 12	9·50
Oakey—Cooyar	107	1,343	26,206	19·51	107	1,213	29,386	24·23	– 130	3,180	4·72
Toowoomba –Helidon	158	1,127	15,688	13·92	172	1,287	23,841	18·52	160	8,153	4·60
Total, Moreton	4,706	50,758	911,584	17·96	4,836	51,761	1,306,477	25·24	1,003	394,893	7·28
WIDE BAY.											
Biggenden	1	8	80	10·00	127	578	14,742	25·51	570	14,662	15·51
Bundaberg	169	679	12,195	17·96	117	344	9,049	26·31	– 335	– 3,146	8·35
Childers	30	217	2,688	12·39	3	22	235	10·68	– 195	– 2,453	– 1·71
Eidsvold	55	466	4,484	9·62	73	401	7,761	19·35	– 65	3,277	9·73
Gayndah	224	2,075	27,547	13·28	278	2,230	51,216	22·97	155	23,669	9·69
Gin Gin	170	1,071	13,421	12·53	68	269	4,764	17·71	– 802	– 8,657	5·18
Gympie	180	1,225	36,430	29·74	265	1,657	55,754	33·65	432	19,324	3·91
Kilkivan	39	275	5,198	18·90	50	385	11,141	28·94	110	5,943	10·04
Maryborough	51	105	1,734	16·51	47	108	2,191	20·29	3	457	3·78
Mt. Perry	5	8	245	30·62	16	36	1,062	29·50	28	817	– 1·12
Nanango	689	16,651	403,059	24·20	680	14,461	451,565	31·23	– 2,193	48,506	7·03
Tiaro	79	398	9,816	24·66	113	458	11,288	24·65	60	1,472	– 0·01
Wienholt	823	20,022	522,771	26·11	755	15,924	462,049	29·02	– 4,098	– 60,722	2·91
Total, Wide Bay	2,515	43,203	1,039,668	24·06	2,592	36,873	1,082,817	29·37	– 6,330	43,149	5·31
PORT CURTIS.											
Banana	15	57	758	13·30	9	55	880	16·00	– 2	122	2·70
Gladstone	119	723	12,816	17·73	150	769	15,934	20·72	46	3,118	2·99
Monto	123	1,242	10,954	8·82	149	1,046	24,984	23·89	– 196	14,030	15·07
Mt. Morgan	26	395	2,495	6·32	113	971	20,503	21·12	576	18,008	14·80
Rockhampton	143	947	16,790	17·73	171	967	16,511	17·07	20	– 279	– 0·66
St. Lawrence	7	25	749	29·96	6	17	370	21·76	– 8	– 379	– 8·20
Total, Port Curtis	433	3,389	44,562	13·15	598	3,825	79,182	20·70	436	34,620	7·55
Total, Edgecumbe	77	192	4,401	22·92	41	93	2,083	22·40	– 99	– 2,318	– 0·52
ROCKINGHAM.											
Atherton	323	18,733	811,673	43·33	309	16,942	223,970	13·22	– 1,791	– 587,703	– 30·11
All Other Districts	44	417	9,561	22·93	33	238	5,118	21·50	– 179	– 4,443	– 1·43
Total, Rockingham	367	19,150	821,234	42·88	342	17,180	229,088	13·33	– 1,970	– 592,146	– 29·55
Total, York Peninsula	6	36	869	24·14	3	40	975	24·38	4	106	0·24
Total, Carpentaria	1	10	40	4·00	4	26	860	33·08	16	820	29·08
Total, Central	5	29	530	18·29	6	27	494	18·30	– 2	– 36	0·01
Total, Maranoa	10	37	522	14·11	16	110	1,170	10·64	73	648	– 3·47
DOWNS.											
Allora	192	4,780	90,345	18·90	206	5,182	142,345	27·47	402	52,000	8·57
Chinchilla	12	149	1,235	8·29	25	209	3,631	17·37	60	2,396	9·08
Clifton	354	11,149	179,384	16·09	320	10,101	239,161	23·68	– 1,048	59,777	7·59
Condamine	4	89	795	8·93	3	55	880	16·00	– 34	85	7·07
Dalby	79	1,052	10,748	10·22	92	873	15,793	18·09	– 179	5·045	7·87
Goondiwindi	..	..	..	..	1	3	36	12·00	3	36	12·00
Inglewood	8	64	1,710	26·72	18	197	2,237	11·36	133	527	– 15·36
Killarney	122	3,361	76,041	22·62	157	5,443	243,418	44·72	2,082	167,377	22·10
Oakey	447	8,257	131,928	15·98	484	8,134	217,445	26·73	– 123	85,517	10·75
Pittsworth	166	4,163	61,306	14,73	143	2,610	52,027	19·93	– 1,553	– 9,279	5·20
Stanthorpe	16	63	796	12·63	19	71	1,420	20·00	8	624	7·37
Texas	6	26	268	10·31	14	80	1,900	23·75	54	1,632	13·44
Toowoomba	381	5,509	108,295	19·66	443	5,926	155,950	26·32	417	47,655	6·66
Warwick	376	11,482	229,503	19·99	360	11,788	362,690	30·77	306	133,187	10·78
Total, Downs	2,163	50,144	892,354	17·80	2,285	50,672	1,438,933	28·40	528	546,579	10·60
Total, State	10,283	166,948	3,715,764	22·26	10,723	160,607	4,142,079	25·79	– 6,341	426,315	3.53

Table No. XXI.

BARLEY.

RETURN SHOWING RESULT OF CROP, DISTINGUISHING BETWEEN MALTING AND OTHER VARIETIES, FOR THE YEAR 1934.

Petty Sessions District.	Malting Grain.			Other Varieties Grain.		
	Acres.	Bushels.	Average per Acre, Bushels.	Acres.	Bushels.	Average per Acre. Bushels.
Allora	269	5,064	18·83	389	5,340	13·73
Banana	..	..	..	4	55	13·75
Clifton	2,810	52,783	18·78	601	7,790	12·96
Crow's Nest	22	298	13·55	31	554	17·87
Dalby	108	1,932	17·89	87	2,241	25·76
Dugandan	20	240	12·00	6	60	10·00
Inglewood	10	33	3·30	70	505	7·21
Killarney	154	2,910	18·90	51	759	14·88
Nanango	..	..	..	54	360	6·67
Oakey { Cooyar	..	..	..	16	231	14·44
Oakey { Oakey	425	6,183	14·55	342	4,559	13·33
Pittsworth	533	11,099	20·82	411	6,343	15·43
Roma	..	..	..	5	36	7·20
Toowoomba	1,183	23,177	19·59	359	7,595	21·16
Warwick	1,066	7,869	7·38	566	8,444	14·92
Wienholt	..	..	..	12	144	12·00
Total State	6,600	111,588	16·91	3,004	45,016	14·99

Table No. XXII.

COTTON.

RETURN FOR TWO YEARS SHOWING THE AREA AND PRODUCE OF COTTON.

Petty Sessions District.	TOTAL AREA.		Increase or Decrease— 1934.	Bearing, 1934.	Not Bearing, 1934.	PRODUCE (UNGINNED.)	
	1933.	1934.				1933.	1934.
	Acres.	Acres.	Acres.	Acres.	Acres.	Lb.	Lb.
Banana	2,535	2,360	— 175	1,374	986	708,510	1,354,872
Biggenden	814	288	— 526	173	115	207,601	60,004
Bowen	16	23	7	23	..	920	22,681
Clermont	168	158	— 10	128	30	7,581	31,326
Condamine	142	207	65	172	35	44,997	25,423
Dugandan	236	41	— 195	31	10	63,538	11,286
Eidsvold	3,358	3,365	7	1,607	1,758	436,397	983,307
Emerald	116	87	— 29	51	36	21,338	15,495
Gatton	417	282	— 135	224	58	141,967	132,231
Gayndah	6,442	6,049	— 393	2,860	3,189	1,086,766	2,626,323
Gin Gin	277	119	— 158	90	29	74,350	14,998
Gladstone	1,106	419	— 687	328	91	211,518	270,642
Harrisville	205	67	— 138	52	15	66,185	22,714
Ipswich	112	49	— 63	32	17	33,767	17,308
Kilkivan	151	67	— 84	32	35	35,029	22,802
Laidley	346	215	— 131	157	58	67,547	40,928
Lowood	230	142	— 88	106	36	58,837	32,818
Marburg	112	76	— 36	59	17	27,652	11,625
Mareeba	73	62	— 11	58	4	4,446	21,225
Monto	14,822	12,388	— 2,434	5,966	6,422	2,559,172	5,736,304
Mount Morgan	48,482	47,460	— 1,022	27,226	20,234	10,297,069	13,973,397
Mount Perry	76	60	— 16	35	25	19,996	27,171
Nanango	259	82	— 177	60	22	66,652	15,437
Rockhampton	2,568	1,482	— 1,086	1,009	473	433,689	926,831
Roma	830	563	— 267	418	145	149,645	112,341
Toogoolawah	68	50	— 18	50	..	14,605	22,102
Wienholt	1,094	981	— 113	670	311	444,965	306,319
All Other Districts	2,041	605	— 1,436	406	199	433,567	86,269
Total State	87,096	77,747	— 9,349	*43,397	34,350	17,718,306	26,924,179

* Of this area 1,017 acres were returned as ratooned for 1935.

NOTE.—The number of farmers growing cotton in 1934 was 2,679.

Table No. XXIII.

SUGAR.

RETURN SHOWING THE NUMBER OF PLANTATIONS, AREA OF AND AVERAGE AREA FOR THE YEAR 1934.

DIVISION.	Number of Plantations under 5 acres.	Number of Plantations 5 acres and over.	Area under Cane.	Average to each Planter.
			Acres.	Acres.
Rockingham and York Peninsula	16	2,091	106,036	50
Edgecumbe and Port Curtis	64	2,652	129,193	48
Wide Bay	236	1,751	62,212	31
Moreton	197	419	6,485	11
Totals	513	6,913	303,926	41

Table No. XXIV.

RETURN FOR FIVE YEARS SHOWING THE NUMBER OF PLANTATIONS, AREA, AND PRODUCE OF SUGAR-CANE.

Year.	Number of Plantations under 5 acres.	Number of Plantations 5 acres and over.	Average to each Planter.	Acres Cultivated.	Acres Crushed.	PRODUCE.	
						Tons Cane.	Tons Sugar, at 94 per cent. Net Titre.
1930	543	6,685	41	296,070	222,044	3,528,660	516,783
1931	541	6,851	42	309,818	233,304	4,034,300	581,276
1932	553	6,678	40	291,136	205,046	3,546,370	514,027
1933	409	6,977	42	311,910	228,154	4,667,122	638,559
1934	513	6,913	41	†303,926	218,426	4,271,380	611,161

† Exclusive of 3,707 acres used for Green Fodder.

Table No. XXV.

RETURN FOR FIVE YEARS SHOWING PERCENTAGES OF YIELDS

Year.	TO EACH ACRE CRUSHED.		Tons of Cane to One Ton of Sugar.
	Tons of Cane.	Tons of Sugar.	
1930	15·89	2·33	6·83
1931	17·29	2·49	6·94
1932	17·30	2·51	6·90
1933	20·46	2·80	7·31
1934	19·56	2·80	6·99

Table No. XXVI.

RETURN FOR TWO YEARS SHOWING PERCENTAGES IN EACH DIVISION OF THE STATE.

Division.	TO EACH ACRE CRUSHED.				TONS CANE TO EACH TON SUGAR.	
	Tons of Cane.		Tons of Sugar.		1933.	1934.
	1933.	1934.	1933.	1934.		
Rockingham and York Peninsula	23·67	19·04	3·24	2·64	7·30	7·20
Edgecumbe and Port Curtis	19·66	19·67	2·82	3·01	6·97	6·54
Wide Bay	14·27	21·02	1·64	2·75	8·73	7·64
Moreton	19·67	14·69	2·55	2·04	7·70	7·29
	20·46	19·56	2·80	2·80	7·31	6·99

Table No. XXVII.

RETURN SHOWING THE AREA AND PRODUCATION OF SUGAR-CANE AND SUGAR BEET IN AUSTRALIA FOR THE YEAR 1934.

—	Area under Cultivation.	Area Cut or Dug for Manufacture.	Yield of Cane, &c.	Sugar Obtained.
	Acres.	Acres.	Tons.	Tons.
Queensland	303,926	218,426	4,271,380	611,161
New South Wales	*	7,572	227,424	30,690
Victoria (beet)	3,234	3,234	50,625	5,303

* Not available.

Table No. XXVIII.

RETURN SHOWING NUMBER OF SUGAR MILLS IN QUEENSLAND DURING THE YEAR 1933–34.

Manufactories.	Works.	Hands Employed.	VALUE.		
			Machinery.	Land and Premises.	Output.
	No.	No.	£	£	£
Refineries } In operation, 1933–34 ..	33	5,683	6,746,884	967,264	11,637,668
Sugar Mills } In operation, 1933–34 ..	2				
Totals	35	5,683	6,746,884	967,264	11,637,668

Table No. XXIX.

RETURN SHOWING AREA, PRODUCE, &C., IN EACH DIVISION OF THE STATE FOR THE YEAR 1934.

Division and District.	Area for Plants.	Area Stand-over or Unproductive.	Area Crushed for Sugar.	Total Area for Sugar. ‡	Weight of Cane.	Sugar 94 N.T.	Molasses Returned.
	Acres.	Acres.	Acres.	Acres.	Tons.	Tons.	Gallons.
Rockingham and York Peninsula—							
Cairns and Douglas	1,820	5,944	35,531	43,295	562,637	76,634	3,333,951
Ingham and Innisfail, &c. ..	2,393	4,880	55,468	62,741	1,170,246	157,342	3,635,980
Total	4,213	10,824	90,999	106,036	1,732,883	233,976	6,969,931
Edgecumbe—							
Ayr and Townsville	1,075	9,208	23,047	33,330	778,873	127,157	3,551,619
Proserpine and Bowen ..	256	2,567	7,989	10,812	112,256	20,705	485,000
Mackay	2,730	25,830	56,365	84,925	828,594	121,939	2,779,821
Total	4,061	37,605	87,401	129,067	1,719,723	269,801	6,816,440
Wide Bay—							
Bundaberg, Gin Gin, &c. ..	546	18,285	22,178	41,009	487,070	69,160	2,214,201
Biggenden, Childers, Maryborough, Tiaro, &c.	227	6,654	14,102	20,983	275,546	31,149	1,055,774
Gympie	1	77	142	220	3,113	*	..
Total	774	25,016	36,422	62,212	765,729	100,309	3,269,975
Port Curtis—							
St. Lawrence†	2	35	89	126	1,410	†	..
Moreton—							
Logan and Southport ..	14	863	593	1,470	9,152	1,009	22,000
Maroochy, &c.	19	2,074	2,922	5,015	42,483	6,066	184,448
Total	33	2,937	3,515	6,485	51,635	7,075	206,448
Total State	9,083	76,417	218,426	‡303,926	4,271,380	611,161	17,262,794

* Cane crushed at Maroochy and Tiaro. † Cane crushed at Mackay. ‡ Exclusive of 3,707 acres used for Green Fodder.
Value of Sugar Cane £6,934,764. Value of Raw Sugar made £9,488,275.

Table No. XXX.

RETURN SHOWING THE SUGAR AVERAGES IN EACH DIVISION OF THE STATE FOR THE YEAR 1934.

Divisions or Groups and Districts.	Tons of Cane per Acre Crushed.	Tons of Sugar per Acre Crushed.	Tons of Cane per Ton of Sugar.
Rockingham and York Peninsula—			
Cairns and Douglas	15·84	2·13	7·44
Ingham and Innisfail, &c.	21·10	2·97	7·10
Total	19·04	2·64	7·20
Edgecumbe—			
Ayr and Townsville	33·79	5·22	6·48
Bowen and Proserpine	14·05	2·10	6·69
Mackay	14·70	2·24	6·58
Total	19·68	3·01	6·54
Wide Bay—			
Bundaberg, Gin Gin, &c.	21·96	2·72	8·07
Biggenden, Childers, Maryborough, Tiaro	19·54	2·80	6·97
Gympie*	21·92	*	*
Total	21·02	2·75	7·64
Port Curtis—			
St. Lawrence†	15·84	†	..
Total	15·84	†	..
Moreton—			
Logan and Southport	15·43	1·72	8·40
Maroochy, &c.	14·54	2·10	7·09
Total	14·69	2·04	7·29
Total State	19·56	2·80	6·99

* Cane crushed in Maroochy and Tiaro.
† Cane crushed in Mackay.

Table No. XXXI.

RETURN FOR TWO YEARS SHOWING THE AREA AND PRODUCE IN EACH DIVISION OF THE STATE.

Division.	Area under cultivation.			Production.				Increase or —Decrease in 1934.	
				1933.		1934.			
	1933.	1934.	Increase or —decrease.	Area Crushed.	Sugar.	Crushed.	Sugar.	Area Crushed.	Sugar.
	Acres.	Acres.	Acres.	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.
Rockingham and York Peninsula	119,278	106,036	— 13,242	97,926	311,529	90,999	233,976	— 6,927	— 77,553
Edgecumbe and Port Curtis	124,762	129,193	4,431	85,936	249,738	87,490	269,801	1,554	20,063
Wide Bay	60,562	62,212	1,650	39,233	*64,182	36,422	*100,309	— 2,811	36,127
Moreton	7,308	6,485	— 823	5,059	13,110	3,515	7,075	— 1,544	— 6,035
Total	311,910	303,926	— 7,984	228,154	638,559	218,426	611,161	— 9,728	— 27,398

* Gympie cane part crushed in Moreton Division.

Table No. XXXII.

SUGAR MILLS.

1. Number of Sugar Mill Companies to which advances have been made under—

The Sugar Works Guarantee Acts	13
"*The Sugar Works Act of* 1911" (Babinda and South Johnstone)	2
"*The Sugar Works Act of* 1922" (Tully River Mill)	1
From Consolidated Revenue (North Eton and Racecourse)	2
From General Loan Fund	7
From Tust Funds	0

2. Number of Tramway Companies to which advances have been made under—

The Sugar Works Guarantee Acts (Double Peak)	1

3. Under other conditions .. None

4. Total amount of advances made to 31st December, 1934, under the Sugar Works Guarantee Acts—

	£ s. d.	£ s. d.
Marian Mill	39,000 0 0	
Mount Bauple	32,480 16 1	
Pleystowe	35,472 1 3	
Nerang River	19,998 18 10	
Gin Gin	50,000 0 0	
Plane Creek	65,000 0 0	
North Eton	18,200 0 0	
Proserpine	54,000 0 0	
Moreton	32,864 15 0	
Mulgrave	46,000 0 0	
Isis	38,636 0 0	
Mossman	66,300 0 0	
Johnstone	847 17 8	
		498,800 8 10

5. Under "*The Sugar Works Act of* 1911"—

Babinda Mill	405,429 18 8	
South Johnstone	648,009 7 8	
		1,053,439 6 4

Under "*The Sugar Works Act of* 1922"—

Tully River	795,221 0 0

From Consolidated Revenue—

North Eton	26,000 0 0	
Racecourse	21,000 0 0	
		47,000 0 0

From Central Loan Fund—

North Eton Mill	62,965 18 4	
Mount Bauple	8,500 0 0	
Gin Gin	2,000 0 0	
Proserpine	128,265 9 4	
Moreton	14,350 0 0	
Mossman	14,071 14 0	
		230,153 1 8

Indebtedness at 31st December, 1934—

6. Under "*The Sugar Works Act of* 1911"—

Babinda Mill	..

Under "*The Sugar Works Act of* 1922"—

Tully River Mill	434,155 7 3

Under "*The South Johnstone, Gin Gin, North Eton, and Mount Bauple Sugar Works Act of* 1927"—

South Johnstone Mill	269,723 4 10	
Gin Gin	19,586 0 0	
North Eton	37,011 7 5	
Mount Bauple	20,000 0 0	
		346,320 12 3

To General Loan Fund—

Proserpine	85,229 19 7

Table No. XXXIII.

ARROWROOT.

RETURN SHOWING ARROWROOT PRODUCTION FOR FIVE YEARS.

Year.	Area.	Production Tubers.	Value.	Year.	No. of Mills.	Hands Employed.	Tubers used.	Arrowroot Made.	Value.
	Acres.	Tons.	£		No.	No.	Tons.	Lbs.	£
1930	761	10,098	21,206	1930-31	12	97	7,244	1,621,265	23,320
1931	789	8,276	11,586	1931-32	12	102	5,608	1,285,452	16,714
1932	691	6,878	12,037	1932-33	12	98	4,820	1,066,081	13,164
1933	797	9,950	13,432	1933-34	14	101	8,908	2,031,010	23,200
1934	835	9,712	10,683						

Table No. XXXIV.

TOBACCO.

RETURN FOR TWO YEARS SHOWING AREA AND PRODUCTION OF TOBACCO.

Division and Petty Sessions District.	1933.				1934.				Increase or Decrease—1934.	
	Total Area.	Not Bearing	Bearing	Produce Dried Leaf.	Total Area.	Not Bearing.	Bearing.	Produce Dried Leaf.		
	Acres.	Acres.	Acres.	Lb.	Acres.	Acres.	Acres.	Lb.	Acres.	Lb.
Moreton—										
Brisbane (A) ..	4	..	4	1,480	..	..	..	..	— 4	— 1,480
Brisbane (B) ..	20	..	20	20,000	..	..	..	..	— 20	— 20,000
Caboolture	8	2	6	338	3	..	3	2,694	— 5	2,356
Gatton	2	..	2	500	1	1	..	..	— 1	— 500
Lowood	1	..	1	500	..	..	..	..	— 1	— 500
Marburg	1	1	..	..	..	..	..	..	— 1	..
Wide Bay—										
Bundaberg	4	..	4	1,613	29	..	29	3,980	25	2,367
Gympie	11	2	9	4,530	..	..	..	..	— 11	— 4,530
Maryborough ..	2	2	..	..	..	..	..	..	— 2	..
Port Curtis—										
Gladstone	50	2	48	19,006	70	38	32	8,481	20	— 10,525
Rockhampton ..	2	..	2	415	..	..	..	..	— 2	— 415
Edgecumbe—										
Ayr	35	19	16	7,433	16	7	9	2,920	— 19	— 4,513
Bowen	58	..	58	25,060	89	13	76	71,506	31	46,446
Charters Towers ..	33	16	17	11,565	23	5	18	18,646	— 10	7,081
Collinsville	..	..	..	..	20	6	14	6,240	20	6,240
Mackay	80	5	75	63,271	31	6	25	38,052	— 49	— 25,219
Ravenswood ..	6	..	6	2,800	8	2	6	5,824	2	3,024
Townsville	340	112	228	55,043	114	4	110	88,896	— 226	33,853
Rockingham—										
Atherton	..	..	..	..	15	..	15	3,849	15	3,849
Cairns	172	4	168	43,385	33	3	30	4,710	— 139	— 38,675
Chillagoe	14	1	13	3,978	1	..	1	70	— 13	— 3,908
Herberton	143	12	131	54,632	27	9	18	3,246	— 116	— 51,386
Ingham	2	..	2	300	6	2	4	1,200	4	900
Mareeba	3,013	786	2,227	1,046,571	1,260	2	1,258	553,253	— 1,753	— 493,318
York Peninsula—										
Cook	17	..	17	2,549	6	..	6	1,300	— 11	— 1,249
Downs—										
Inglewood	330	72	258	187,940	398	164	234	82,131	68	— 105,809
Stanthorpe	150	64	86	42,546	82	40	42	40,653	— 68	— 1,893
Texas	825	219	606	484,299	353	202	151	87,398	— 472	— 396,901
Toowoomba ..	36	36	..	..	..	..	..	..	— 36	..
Total State	5,359	1,355	4,004	2,079,754	2,585	504	2,081	1,025,049	— 2,774	—1,054,705

There were 363 growers.

N.B.—Brisbane (B) refers to South Brisbane.

Table No. XXXV.

GRAPES.

RETURN FOR TWO YEARS SHOWING AREA UNDER VINES AND PRODUCTION OF GRAPES IN THE PRINCIPAL DISTRICTS OF THE STATE.

Petty Sessions District.	AREA UNDER VINES.								
	1933.			1934.			Increase or Decrease.	1933.	1934.
	Bearing.	Not Bearing.	Total Area.	Bearing.	Not Bearing.	Total Area.		Grapes Gathered,	Grapes Gathered.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Lb.	Lb.
Brisbane (A)	289	47	336	282	28	310	— 26	578,019	412,943
Brisbane (B)	5	..	5	5	..	5	..	34,410	9,550
Cape River	1	..	1	1	..	1	..	2,776	2,542
Charleville	1	..	1	1	..	1	..	3,185	2,130
Charters Towers ..	19	..	19	18	..	18	— 1	50,486	41,819
Chinchilla	4	..	4	7	1	8	4	44,900	30,094
Cleveland	4	3	7	3	2	5	— 2	6,198	4,702
Gladstone	6	..	6	4	1	5	— 1	7,085	7,820
Herberton	7	..	7	5	..	5	— 2	15,680	8,737
Inglewood	1	..	1	1	..	1	..	6,340	5,412
Laidley	1	..	1	3	..	3	2	1,800	4,900
Logan	5	..	5	4	1	5	..	4,851	4,890
Lowood	35	7	42	8	5	13	— 29	303,894	190,500
Maryborough	22	1	23	10	1	11	— 12	19,842	10,681
Nanango	..	..	..	1	..	1	1	..	2,190
Oakey	5	1	6	5	..	5	— 1	12,940	14,173
Redcliffe	1	..	1	2	..	2	1	1,564	7,832
Rockhampton	25	5	30	24	4	28	— 2	91,332	65,405
Roma	393	47	440	375	25	400	— 40	679,045	778,830
Stanthorpe	707	261	968	694	333	1,027	59	3,065,656	3,079,326
St. George	2	..	2	2	..	2	..	3,400	11,200
Tiaro	1	1	2	2	1	3	1	5,000	3,360
Toogoolawah	4	..	4	10	..	10	6	11,240	4,110
Toowoomba	6	..	6	10	..	10	4	29,371	25,484
Warwick	18	..	18	16	6	22	4	22,055	48,344
Wynnum	5	1	6	8	..	8	2	22,080	34,056
All Other Districts ..	19	3	22	16	1	17	— 5	29,873	14,193
Totals	1,586	377	1,963	1,517	409	1,926	— 37	5,053,022	4,825,223

N.B.—Brisbane (B) refers to South Brisbane.

Table No. XXXVI.

WINE.

RETURN SHOWING THE PRINCIPAL DISTRICTS IN WHICH WINE WAS MADE DURING THE YEAR 1934, AND TOTAL STATE FIGURES FOR FIVE YEARS.

Petty Sessions District.	Number of Makers	Quantity of Wine Made.	Quantity of Wine Spirit Distilled.
		Gallons.	Gallons.
Lowood	1	700	..
Roma	2	32,369	..
Stanthorpe	2	1,440	..
Toogoolawah	1	550	..
Toowoomba	9	974	..
Warwick	1	800	..
Wynnum	1	570	..
All Other Districts	9	648	..
Total State	26	38,051	611
Total State, 1934	26	38,051	611
1933	38	31,796	2,606
1932	39	35,301	1,488
1931	47	41,456	3,663
1930	50	48,899	3,612

Table No. XXXVII.

BANANAS.

RETURN FOR TWO YEARS SHOWING THE AREA AND PRODUCTION OF BANANAS IN THE STATE.

Petty Sessions District.	No. of Growers 1934.	Area.				Produce.		Average per Acre.	
		Total, 1933.	Bearing, 1934.	Not yet Bearing, 1934.	Total Area 1934.	1933.	1934.	1933.	1934.
		Acres.	Acres.	Acres.	Acres.	Bunches	Bunches	Bunches.	Bunches.
Atherton	5	13	10	2	12	2,820	2,700	217	270
Ayr	2	35	24	..	24	9,000	4,000	257	167
Beaudesert	4	37	24	2	26	4,606	6,064	230	253
Biggenden	2	9	8	..	8	2,000	2,700	250	338
Bowen	8	15	8	2	10	2,988	1,369	199	171
Brisbane (A)	71	391	225	119	344	87,618	48,610	449	216
Brisbane (B)	5	12	12	9	21	1,500	3,622	300	302
Bundaberg	26	216	84	23	107	50,359	36,933	289	440
Caboolture	37	324	233	79	312	33,966	53,132	231	228
Cairns	39	162	162	14	176	19,305	16,360	146	101
Cardwell	20	46	58	4	62	5,098	8,022	138	138
Childers	1	..	1	..	1	..	500	..	500
Cleveland	130	251	131	138	269	33,020	33,902	275	259
Cook	4	6	5	..	5	482	459	80	92
Dugandan	1	6	6	..	6	1,500	2,000	250	333
Esk	1	60	..	3	3	4,085	..	141	..
Gayndah	3	11	5	..	5	980	453	122	91
Gin Gin	1	2	1	..	1	100	100	100	100
Gladstone	18	64	43	16	59	5,203	7,600	163	177
Gympie	185	1,990	1,117	286	1,403	393,073	316,414	295	283
Harrisville	2	1	1	..	1	20	90	20	90
Ingham	1	7	..	4	4	230	..	77	..
Innisfail	1	13	11	3	14	1,228	224	123	20
Ipswich	..	9	..	..	..	700	..	78	..
Kilcoy	13	95	92	50	142	10,857	29,723	162	323
Kilkivan	1	22	12	..	12	500	1,200	29	100
Laidley	1	2	2	..	2	300	330	150	165
Logan	177	686	463	229	692	118,473	135,931	291	294
Mackay	18	103	53	42	95	15,806	16,761	203	316
Mareeba	1	1	1	..	1	80	60	80	60
Maroochy	351	2,382	1,521	569	2,090	373,177	402,781	286	265
Maryborough	26	86	69	4	73	11,378	10,502	167	152
Mount Morgan	1	..	1	..	1	..	30	..	30
Mount Perry	2	..	5	3	8	..	730	..	146
Nanango	1	..	..	2	2	..	..	..	..
Proserpine	..	14	..	..	..	672	..	112	..
Redcliffe	62	804	308	135	443	162,601	96,888	340	315
Rockhampton	57	308	225	94	319	124,828	89,733	627	399
Somerset	3	14	70	123	193	480	680	34	10
Southport	235	1,983	1,632	1,145	2,777	430,139	468,355	330	287
St. Lawrence	4	6	9	..	9	537	1,750	90	194
Tiaro	16	141	51	28	79	12,275	8,490	118	166
Toogoolawah	1	12	6	1	7	1,600	1,000	178	167
Townsville	13	50	36	12	48	5,761	7,363	165	205
Woodford	28	440	238	115	353	80,240	69,266	294	291
Wynnum	10	97	64	40	104	17,920	19,073	272	298
Total State	1,588	10,926	7,027	3,296	10,323	2,027,505	1,905,900	299	271

N.B.—Brisbane (B) refers to South Brisbane.

Table No. XXXVIII.

PINEAPPLES.

RETURN FOR TWO YEARS SHOWING THE AREA AND PRODUCTION OF PINEAPPLES IN THE STATE.

Petty Sessions District.	1933.		1934.				Increase or Decrease—1934.	
	Total Area.	Produce.	Bearing.	Not yet Bearing.	Total Area.	Produce.	Area.	Produce.
	Acres.	Dozen.	Acres.	Acres.	Acres.	Dozen.	Acres.	Dozen.
Atherton	..	..	1	..	1	40	1	40
Ayr	..	..	4	..	4	40	4	40
Beaudesert	1	..	..	2	2	..	1	..
Biggenden	..	..	6	..	6	800	6	800
Bowen	156	22,323	150	38	188	26,333	32	4,010
Brisbane (A)	441	97,724	351	56	407	82,983	— 34	— 14,741
Brisbane (B)	274	36,717	198	13	211	37,054	— 63	337
Bundaberg	62	7,763	17	6	23	3,120	— 39	— 4,643
Caboolture	626	139,849	495	135	630	74,122	4	— 65,727
Cairns	43	3,870	45	4	49	4,170	6	300
Cardwell	8	730	7	..	7	433	— 1	— 297
Childers	1	250	3	..	3	500	2	250
Cleveland	759	143,430	504	168	672	34,661	— 87	— 108,769
Dugandan	2	..	1	..	1	75	— 1	75
Esk	1	40	..	..	..	..	— 1	— 40
Gayndah	11	450	4	1	5	680	— 6	230
Gin Gin	9	590	8	..	8	1,760	— 1	1,170
Gladstone	47	1,581	18	7	25	2,974	— 22	1,393
Gympie	498	124,788	413	115	528	141,155	30	16,367
Ingham	12	1,390	..	3	3	..	— 9	— 1,390
Ipswich	44	6,900	30	..	30	45,040	— 14	38,140
Kilcoy	1	20	..	..	..	..	— 1	— 20
Laidley	1	100	2	..	2	85	1	— 15
Logan	120	26,905	71	14	85	17,269	— 35	— 9,636
Lowood	18	3,510	11	1	12	2,530	— 6	— 980
Mackay	3	884	5	1	6	1,039	3	155
Marburg	10	820	11	1	12	1,270	2	450
Maroochy	1,829	596,195	1,471	279	1,750	451,358	— 79	— 144,837
Maryborough	226	37,169	177	15	192	37,404	— 34	235
Mount Morgan	11	708	10	..	10	1,235	— 1	527
Mount Perry	..	..	2	..	2	82	2	82
Proserpine	1	140	1	..	1	410	..	270
Redcliffe	84	12,703	61	28	89	43,547	5	30,844
Rockhampton	235	36,827	189	26	215	56,140	— 20	19,313
Rosewood	..	..	..	1	1	..	1	..
Somerset	6	120	11	..	11	146	5	26
Southport	36	3,747	18	16	34	3,800	— 2	53
St. Lawrence	8	522	8	..	8	1,300	..	778
Tiaro	37	3,027	29	6	35	3,500	— 2	473
Townsville	129	25,045	169	9	178	32,977	49	7,932
Wienholt	..	..	3	..	3	150	3	150
Woodford	15	1,976	15	1	16	2,794	1	818
Wynnum	124	16,487	84	35	119	13,855	— 5	— 2,632
Totals State	5,889	1,355,300	4,603	981	5,584	1,126,831	— 305	— 228,469

N.B.—Brisbane (B) refers to South Brisbane.

Table No. XXXIX.

ORANGES.

RETURN FOR TWO YEARS SHOWING THE AREA AND PRODUCTION OF ORANGES IN THE PRINCIPAL DISTRICTS OF THE STATE.

Petty Sessions District.	Total Area.		Bearing, 1934.	Not yet Bearing, 1934.	Produce.		Increase or Decrease—1934.	
	1933	1934.	Area.	Area.	1933.	1934.	Area.	Produce.
	Acres.	Acres.	Acres.	Acres.	Bushels.	Bushels.	Acres.	Bushels.
Allora	22	39	33	6	2,000	2,500	17	500
Beaudesert	16	2	2	..	984	1,115	— 14	131
Bowen	43	48	41	7	1,367	1,567	5	200
Brisbane (A)	27	20	13	7	711	1,043	— 7	332
Brisbane (B)	11	13	5	8	1,093	667	2	— 426
Bundaberg	31	39	36	3	3,709	5,320	8	1,611
Caboolture	67	82	68	14	7,905	9,572	15	1,667
Cairns	36	52	37	15	3,471	5,163	16	1,692
Cape River	16	15	12	3	1,467	1,666	— 1	199
Cardwell	204	211	147	64	17,966	11,955	7	— 6,011
Charleville	13	13	10	3	975	995	..	20
Charters Towers	59	65	61	4	3,354	3,154	6	— 200
Childers	37	31	29	2	3,650	3,650	— 6	..
Cleveland	40	25	16	9	1,449	1,013	— 15	— 436
Crow's Nest	28	27	24	3	1,047	2,571	— 1	1,524
Eidsvold	1	4	4	..	164	622	3	458
Emerald	23	31	30	1	2,400	5,834	8	3,434
Esk	57	64	56	8	6,187	4,229	7	— 1,958
Gatton	105	93	58	35	13,428	11,495	— 12	— 1,933
Gayndah	156	139	82	57	12,969	8,737	— 17	— 4,232
Gladstone	42	48	43	5	1,794	3,307	6	1,513
Gympie	55	63	55	8	3,006	13,347	8	10,341
Ingham	20	27	20	7	2,295	9,689	7	7,394
Ipswich	11	11	11	..	185	1,320	..	1,135
Logan	71	47	46	1	6,428	7,448	— 24	1,020
Lowood	25	23	23	..	2,220	2,200	— 2	— 20
Mackay	68	45	31	14	4,683	5,850	— 23	1,167
Maroochy	932	1,003	893	110	86,759	127,152	71	40,393
Maryborough	519	454	382	72	43,904	75,849	— 65	31,945
Mount Morgan	17	20	16	4	1,033	1,790	3	757
Proserpine	28	23	22	1	1,613	1,372	— 5	— 241
Redcliffe	33	19	15	4	2,012	1,415	— 14	— 597
Rockhampton	252	232	198	34	23,703	27,841	— 20	4,138
Roma	39	48	33	15	3,842	3,013	9	— 829
Southport	91	80	62	18	9,255	7,444	— 11	— 1,811
Tiaro	11	60	56	4	1,165	3,535	49	2,370
Toowoomba (Helidon)	30	15	9	6	4,034	1,730	— 15	— 2,304
Toowoomba (Toowoomba)	21	24	20	4	2,133	1,987	3	— 146
Townsville	16	21	15	6	626	872	5	246
Wienholt	1	3	3	..	26	660	2	634
Woodford	9	10	8	2	899	1,212	1	313
All Other Districts	141	132	111	21	6,485	6,306	— 9	— 179
Total State	3,424	3,421	2,836	585	294,396	388,207	— 3	93,811

N.B.—Brisbane (B) refers to South Brisbane.

Table No. XL.

MANGOES.

RETURN FOR TWO YEARS SHOWING THE AREA AND PRODUCTION OF MANGOES IN THE PRINCIPAL DISTRICTS OF THE STATE.

Petty Sessions District.	Total Area.		Bearing, 1934.	Not yet Bearing, 1934.	Produce.		Increase or Decrease—1934.	
	1933.	1934.			1933.	1934.		
	Acres.	Acres.	Acres.	Acres.	Bushels.	Bushels.	Acres.	Bushels.
Bowen	35	51	35	16	2,005	7,467	16	5,462
Brisbane (A)	4	9	9	..	55	874	5	819
Brisbane (B)	1	1	1	..	20	6	..	— 14
Caboolture	..	1	1	..	..	40	1	40
Cairns	1	..	..	..	12	..	— 1	— 12
Charters Towers	..	1	1	..	..	60	1	60
Childers	1	16	16	..	100	3,000	15	2,900
Cleveland	1	6	5	1	..	102	5	102
Gayndah	1	..	..	..	..	..	— 1	..
Gladstone	3	3	2	1	204	690	..	486
Gympie	4	6	4	2	502	713	2	211
Ingham	5	14	12	2	165	7,959	9	7,794
Ipswich	..	1	1	..	..	58	1	58
Logan	9	18	17	1	235	527	9	292
Mackay	22	14	12	2	1,563	2,344	— 8	781
Marburg	1	1	1	..	40	40	..	..
Mareeba	1	1	1	..	50	69	..	19
Maroochy	4	1	1	..	22	124	— 3	102
Maryborough	3	4	4	..	160	32	1	— 128
Mount Morgan	3	3	3	..	216	183	..	— 33
Proserpine	16	17	16	1	367	1,885	1	1,518
Redcliffe	3	2	2	..	28	80	— 1	52
Rockhampton	19	23	20	3	1,318	1,772	4	454
Somerset	6	8	4	4	1,690	759	2	— 931
Southport	1	1	1	..	62	79	..	17
Tiaro	56	2	2	..	1,581	191	— 54	— 1,390
Townsville	7	6	4	2	636	969	— 1	333
Woodford	1	1	1	..	95	110	..	15
Total State	208	211	176	35	11,126	30,133	3	19,007

N.B.—Brisbane (B) refers to South Brisbane.

Table No. XLI.

PASTURAGE AND OTHER FODDER CROPS.

RETURN FOR FIVE YEARS SHOWING THE AREA UNDER PASTURAGE.

—	1930. Acres.	1931. Acres.	1932. Acres.	1933. Acres.	1934. Acres.
Hay	52,228	59,601	64,076	92,943	86,477
Green forage	217,282	309,957	392,762	311,462	338,312
Artificially sown pasture	661,839	718,700	732,095	777,706	869,777
Totals	931,349	1,088,258	1,188,933	1,182,111	1,294,566

Table No. XLII.

ENSILAGE.

RETURN FOR TWO YEARS SHOWING NUMBER OF MAKERS AND ENSILAGE MADE IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE.

Petty Sessions District.	1933.		1934.		Increase, 1934.	Decrease, 1934
	No. of Makers.	Tons.	No. of Makers.	Tons.	Tons.	Tons.
Atherton	9	617	6	413	..	204
Beaudesert	6	395	1	50	..	345
Brisbane (A)	1	30	3	160	130	..
Brisbane (B)	11	1,140	1	1,000	..	140
Bundaberg	..	..	1	49	49	..
Caboolture	..	..	1	60	60	..
Cairns	1	10	..	..	..	10
Charters Towers	3	75	3	95	20	..
Chinchilla	..	..	1	40	40	..
Cleveland	1	80	1	50	..	30
Clifton	1	60	3	60	..	..
Dugandan	3	240	5	445	205	..
Eidsvold	..	..	1	140	140	..
Esk	4	153	4	315	162	..
Gatton	1	260	1	250	..	10
Gayndah	5	273	2	140	..	133
Gladstone	4	75	..	..	..	75
Goodna	1	280	1	40	..	240
Gympie	2	70	..	..	..	70
Harrisville	1	80	..	..	..	80
Herberton	1	50	..	..	..	50
Inglewood	1	100	..	..	..	100
Ipswich	1	60	3	220	160	..
Kilcoy	2	56	1	60	4	..
Kilkivan	1	7	..	..	..	7
Laidley	1	6	4	200	194	..
Logan	2	95	..	..	..	95
Marburg	11	324	4	150	..	174
Maroochy	3	520	5	642	122	..
Maryborough	2	100	3	105	5	..
Mitchell	1	2	..	..	..	2
Monto	1	42	2	78	36	..
Mount Morgan	1	15	..	..	..	15
Nanango	11	558	6	500	..	58
Oakey	2	350	1	120	..	230
Redcliffe	3	300	2	170	..	130
Rockhampton	1	75	3	92	17	..
Roma	2	140	5	198	58	..
Rosewood	1	100	2	25	..	75
Southport	2	84	1	50	..	34
St. Lawrence	1	15	1	20	5	..
Toogoolawah	..	..	3	110	110	..
Toowoomba	..	..	3	165	165	..
Townsville	11	509	6	339	..	170
Warwick	2	60	1	30	..	30
Wienholt	2	150	4	330	180	..
Woodford	9	584	8	535	..	49
Wynnum	5	375	2	120	..	255
Totals State	134	8,515	105	7,566	..	949

Value of Ensilage made 1933, £12971, ; 1934, £11,067.

N.B.—Brisbane (B) refers to South Brisbane.

Table No. XLIII.

RETURN SHOWING THE TOTAL EXTENT OF LAND UNDER EACH DESCRIPTION OF CROP, IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE DURING THE YEAR 1934.

Divisions.	Total Area of Petty Sessions Districts.	Total Extent of Land under Permanent Pasture with Artificially Sown Grasses.	Total Extent of Land under Cultivation.	Land in Fallow, Lying Idle.	Total Extent of Land under Crop.	GRAIN CROPS.							POTATOES.			COTTON.		Sugar-cane.	Arrowroot.	Peanuts.	TOBACCO.		VINES.		BANANAS.		PINEAPPLES.		ORANGES.	
						Wheat.	Oats.	BARLEY.		Maize.	Rye.	Rice.	English.	Sweet.	Pumpkins.	Bearing.	Not Bearing.				Bearing.	Not Bearing.	Bearing.	Not Bearing.	Bearing.	Not Bearing.	Bearing.	Not Bearing.	Bearing.	Not Bearing.
								Malting.	Other.																				
Moreton Division.	Sq.miles.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ae.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac,	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.
Brisbane (A) ..	336	1,469	6,727	707	6,020	..	..	..	..	54	..	..	124	45	281	..	..	..	..	..	..	..	282	28	225	119	351	56	13	7
Brisbane (B) ..	213	404	2,039	270	1,769	..	..	..	..	9	..	..	11	2	11	..	..	..	..	..	..	..	5	..	12	9	198	13	5	8
Beaudesert	968	21,349	14,426	2,047	12,379	..	11	..	..	3,972	..	..	237	42	619	2	..	..	23	..	..	..	..	..	24	2	..	2	2	..
Caboolture	304	3,111	1,450	97	1,353	..	..	..	..	18	..	..	58	13	27	..	..	..	..	..	..	3	..	..	233	79	495	135	68	14
Cleveland	200	99	3,226	477	2,749	..	..	..	..	6	..	..	14	7	12	..	..	..	..	23	..	..	3	2	131	138	504	168	16	9
Crow's Nest	365	10,045	20,713	4,175	16,538	232	26	22	31	5,533	..	..	301	15	147	..	..	..	..	..	..	..	..	..	..	..	..	..	24	3
Dugandan	522	7,411	21,723	1,681	20,042	26	2	20	6	6,852	4	..	1,015	30	864	31	10	1	..	..	..	..	..	..	6	..	1	..	1	..
Esk	563	2,687	4,305	592	3,713	..	..	..	..	908	1	..	122	54	102	41	25	..	..	..	..	..	1	..	..	3	..	..	56	8
Gatton	504	9,255	23,103	1,948	21,155	60	..	..	..	5,601	1	..	1,200	305	2,469	224	58	..	..	..	..	1	..	..	..	..	..	..	58	35
Goodna	61	35	454	66	388	..	..	..	..	97	..	..	20	2	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Harrisville	230	458	17,467	1,675	15,792	..	..	..	..	3,593	..	..	214	94	558	52	15	..	..	1	..	..	1	..	1	..	..	..	1	..
Ipswich	167	100	3,950	421	3,529	..	..	..	..	737	..	..	101	14	20	32	17	..	..	..	..	..	..	..	..	..	30	..	11	..
Kilcoy	305	4,668	3,613	642	2,971	..	..	..	..	831	..	..	87	47	79	..	..	..	43	..	..	..	..	..	92	50	..	..	1	1
Laidley	222	400	22,696	2,873	19,823	27	..	..	..	6,491	..	..	1,019	191	1,262	157	58	..	..	..	..	..	3	..	2	..	2	..	4	1
Logan	239	1,062	5,990	537	5,453	..	..	..	..	473	..	..	593	79	42	..	..	1,428	240	2	..	..	4	1	463	229	71	14	46	1
Lowood	208	..	13,553	863	12,690	..	..	..	..	4,512	..	..	974	130	911	106	36	..	..	..	..	..	8	5	..	..	11	1	23	..
Marburg	53	535	8,802	247	8,555	..	4	..	..	2,470	..	..	161	66	134	59	17	..	..	6	..	..	..	..	..	..	11	1	1	..
Maroochy	702	53,257	12,179	856	11,323	..	3	..	..	176	..	..	19	17	3	..	..	4,967	43	27	..	..	..	..	1,521	569	1,471	279	893	110
Redcliffe	252	13,044	3,752	274	3,478	..	..	..	..	161	..	..	132	42	80	..	..	40	..	..	..	..	2	..	308	135	61	28	15	4
Rosewood	264	50	12,876	2,255	10,621	..	..	..	..	2,633	..	..	247	62	262	37	17	..	4	..	..	..	..	..	..	..	..	1	..	..
Southport	502	48,880	5,140	351	4,789	4	..	..	..	366	4	..	200	23	25	..	..	42	441	..	..	..	..	..	1,632	1,145	18	16	62	18
Toogoolawah ..	801	2,202	12,781	451	12,330	..	..	..	..	3,277	..	..	335	216	580	50	..	..	2	..	..	..	10	..	6	1	..	..	1	..
Woodford	202	33,534	2,332	274	2,058	..	..	..	..	489	..	..	64	25	47	..	1	7	4	..	..	..	..	..	238	115	15	1	8	2
Wynnum	28	22	818	73	745	..	..	..	..	2	1	..	9	5	4	..	..	..	..	2	..	..	8	..	64	40	84	35	..	..
Cooyar	225	10,061	5,588	1,034	4,554	49	15	..	16	1,213	..	..	180	1	158	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Helidon	252	3,584	6,939	418	6,521	..	..	..	..	1,287	..	..	415	145	568	16	..	..	..	..	..	..	..	..	..	..	..	..	9	6
Total Moreton ..	8,688	227,722	236,642	25,304	211,338	398	61	42	53	51,761	11	..	7,852	1,672	9,278	807	254	6,485	806	55	3	1	329	36	4,958	2,634	3,323	750	1,318	227
Wide Bay Division.																														
Biggenden	653	25,588	4,649	1,488	3,161	..	..	..	..	578	..	..	45	8	50	173	115	104	..	21	..	..	..	..	8	..	6	..	1	3
Bundaberg	1,460	177	37,169	3,348	33,821	..	..	..	..	344	..	..	67	19	4	27	6	32,487	4	1	29	..	1	..	84	23	17	6	36	3
Childers	647	948	15,851	2,571	13,280	..	..	..	..	22	..	..	1	..	..	9	..	13,170	..	..	..	..	..	..	1	..	3	..	29	2
Eidsvold	2,383	11,834	6,617	1,386	5,231	..	..	..	..	401	..	..	40	58	122	1,607	1,758	..	..	..	..	..	..	..	..	..	..	..	4	..
Gayndah	3,727	41,929	21,797	4,126	17,671	107	4	..	..	2,230	..	..	69	41	263	2,860	3,189	..	..	25	..	..	..	..	5	..	4	1	82	57
Gin Gin	1,056	1,003	12,158	2,926	9,232	..	..	..	..	269	..	..	18	1	1	90	29	8,522	..	..	..	..	..	..	1	..	8	..	3	..
Gympie	1,634	140,128	10,991	1,348	9,643	..	..	..	..	1,657	6	..	127	113	61	6	6	220	12	6	..	..	2	..	1,117	286	413	115	55	8
Kilkivan	333	415	2,122	658	1,464	..	..	..	..	385	..	..	27	14	34	32	35	..	..	..	..	..	..	..	12	..	..	..	1	..
Maryborough ..	1,697	1,535	8,591	1,201	7,390	..	..	..	..	108	..	..	154	4	7	11	7	5,480	..	20	..	..	10	1	69	4	177	15	382	72
Mt. Perry	868	496	306	169	137	..	..	..	..	36	..	..	2	1	1	35	25	..	..	3	..	..	..	..	5	3	2	..	3	..
Nanango	1,755	42,700	54,435	7,546	46,889	146	113	..	54	14,461	..	..	370	103	459	60	22	..	4	3,425	..	..	1	..	..	2	..	..	3	1
Tiaro	2,607	8,625	4,868	988	3,880	..	..	..	..	458	..	..	141	11	19	8	12	2,229	4	2	..	..	2	1	51	28	29	6	56	4
Wienholt	2,269	85,406	58,610	5,127	53,483	369	190	..	12	15,924	10	..	1,072	53	581	670	311	..	5	2,733	..	..	..	..	..	..	3	..	3	..
Total Wide Bay	21,089	360,784	238,164	32,882	205,282	622	307	..	66	36,873	16	..	2,133	426	1,602	5,588	5,515	62,212	29	6,236	29	..	16	2	1,353	346	662	143	658	150
Port Curtis Division.																														
Banana	1,875	45	4,217	754	3,463	325	6	..	4	55	..	..	10	..	20	1,374	986	..	..	..	..	..	1	..	..	..	..	..	2	..
Gladstone	3,457	18,807	4,570	1,019	3,551	..	..	..	..	769	..	..	284	10	53	328	91	..	..	5	32	38	4	1	43	16	18	7	43	5
Monto	1,773	32,669	19,840	2,196	17,644	..	..	..	..	1,046	..	..	125	4	173	5,966	6,422	..	..	..	..	..	..	..	..	..	..	..	1	2
Mt. Morgan	3,246	18,048	51,985	2,248	49,737	340	..	..	..	971	..	..	48	7	53	27,226	20,234	..	..	26	..	..	..	..	1	..	10	..	16	4
Rockhampton ..	13,752	38,863	8,443	2,035	6,408	..	..	..	..	967	..	..	177	36	190	1,009	473	..	..	422	..	..	24	4	225	94	189	26	198	34
St. Lawrence ..	7,129	622	384	78	306	..	..	..	..	17	..	..	6	2	4	44	3	126	..	..	..	..	..	..	9	..	8	..	..	..
Total Port Curtis	31,232	109,054	89,439	8,330	81,109	665	6	..	4	3,825	..	..	650	59	493	35,947	28,209	126	..	453	32	38	29	5	278	110	225	33	260	45

Table No. XLIII.—*continued.*

Divisions.	Total Area of Petty Sessions Districts.	Total Extent of Land under Permanent Pasture with Artificially Sown Grasses.	GRAIN CROPS.											POTATOES.			COTTON.					TOBACCO.		VINES.		BANANAS.		PINEAPPLES.		ORANGES.	
			Total Extent of Land under Cultivation.	Land in Fallow, Lying Idle, &c.	Total Extent of Land under Crop.	Wheat.	Oats.	BARLEY.		Maize.	Rye.	Rice.																		
								Malting.	Other.				English.	Sweet.	Pumpkins.	Bearing.	Not Bearing.	Sugar-cane.	Arrowroot.	Peanuts.	Bearing.	Not Bearing.	Bearing.	Not Bearing.	Bearing.	Not Bearing.	Bearing.	Not Bearing.	Bearing.	Not Bearing.
	Sq. mls.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.
Edgecumbe Division.																														
Ayr	2,103	..	42,322	9,160	33,162	..	..	..	..	..	..	..	40	..	15	10	..	33,051	..	..	9	7	..	..	24	..	4	..	..	..
Bowen	1,900	..	3,881	1,554	2,327	..	..	..	..	47	..	..	52	1	272	23	..	272	..	..	76	13	..	..	8	2	150	38	41	7
Cape River	8,083	..	76	10	66	..	..	..	..	12	..	..	11	5	8	..	..	..	..	..	..	..	1	..	..	..	..	..	12	3
Charters Towers	9,921	18	205	6	199	..	..	..	..	..	..	..	3	1	7	..	..	..	..	..	18	5	18	..	..	..	..	..	61	4
Collinsville	6,310	..	47	..	47	..	..	..	..	..	..	..	..	..	4	13	..	..	..	..	14	6	..	..	..	..	..	..	..	..
Mackay	8,003	77	105,806	20,242	85,564	..	..	..	..	6	..	..	12	..	5	2	2	84,925	..	..	25	6	1	..	53	42	5	1	31	14
Proserpine	829	..	15,846	5,224	10,622	..	..	..	..	3	..	..	4	..	2	..	..	10,540	..	..	..	..	..	..	..	..	1	..	22	1
Ravenswood	1,152	..	14	..	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	2	..	..	..	..	..	..	6	..
Townsville	2,619	1	1,559	503	1,056	1	..	..	..	25	..	..	104	12	27	11	..	279	..	2	110	4	..	..	36	12	169	9	15	6
Total Edgecumbe	40,920	96	169,756	36,699	133,057	1	..	..	..	93	..	..	226	19	340	59	2	129,067	..	2	258	43	20	..	121	56	329	48	188	35
Rockingham Division.																														
Atherton	682	54,332	18,726	753	17,973	..	..	..	..	16,942	..	..	18	11	1	22	16	..	..	462	15	..	..	..	10	2	1	..	2	2
Cairns	842	855	42,674	8,112	34,562	..	..	..	..	3	..	..	13	6	..	32	..	34,131	..	..	30	3	..	..	162	14	45	4	37	15
Cardwell	1,057	215	12,256	2,129	10,127	..	..	..	..	5	..	..	..	..	3	4	2	9,731	..	..	..	..	..	..	58	4	7	..	147	64
Chillagoe	8,667	..	6	4	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..
Herberton	5,345	10,543	537	265	272	..	..	..	..	189	..	..	4	..	1	..	..	..	..	2	18	9	5	..	..	..	..	..	20	7
Ingham	3,277	40	32,418	7,535	24,883	..	..	..	..	..	..	..	3	..	..	..	..	24,783	..	..	4	2	..	..	..	4	..	3	1	..
Innisfail	572	162	36,944	8,702	28,242	..	..	..	..	..	..	..	..	..	..	..	..	28,227	..	..	..	..	..	..	11	3	..	..	1	..
Mareeba	2,842	3,708	2,754	1,184	1,570	..	..	..	..	41	..	..	14	2	1	58	4	..	..	156	1,258	2	..	..	1	..	..	..	4	1
Total Rockingham	23,284	69,855	146,315	28,684	117,631	..	..	..	..	17,180	..	..	52	19	6	116	22	96,872	..	620	1,326	16	5	..	242	27	53	7	212	89
York Peninsula Division.																														
Coen	25,396	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cook	23,921	..	149	..	149	..	..	..	..	40	..	..	..	..	1	..	..	..	..	73	6	..	..	..	5	..	..	..	21	1
Douglas	787	3,017	10,676	1,505	9,171	..	..	..	..	..	..	..	..	..	..	..	..	9,164	..	..	..	..	..	..	..	..	..	..	3	..
Somerset	4,586	..	852	120	732	..	..	..	..	..	..	..	..	66	83	..	..	..	..	..	..	..	..	..	70	123	11	..	..	..
Total York Peninsula	54,690	3,017	11,677	1,625	10,052	..	..	..	..	40	..	..	..	66	84	..	..	9,164	..	73	6	..	..	..	75	123	11	..	24	1
Carpentaria Division.																														
Burke	18,228	..	4	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Camooweal	10,246	..	5	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cloncurry	39,468	..	10	..	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..
Croydon	6,880	..	5	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Etheridge	19,640	..	33	..	33	..	..	..	..	26	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..
Hughenden	9,944	..	26	4	22	..	..	..	..	..	..	..	4	2	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Julia Creek	10,647	..	4	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mount Isa	1,395	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Norman	25,570	..	9	4	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Richmond	13,354	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Carpentaria	155,372	..	99	12	87	..	..	..	..	26	..	..	4	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	9	..
Central-Western Division.																														
Boulia	21,027	..	6	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diamantina	22,684	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Isisford	7,929	..	5	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jundah	10,977	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Windorah	17,832	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Winton	23,146	..	7	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Central-Western	103,595	..	18	1	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Table No. XLIII.—*continued.*

Divisions.	Total Area of Petty Sessions Districts.	Total Extent of Land under Permanent Pasture with Artificially Sown Grasses.	Total Extent of Land under Cultivation.	Land in Fallow, Lying Idle, &c.	Total Extent of Land under Crop.	GRAIN CROPS.							POTATOES.		PUMPKINS.	COTTON.		SUGAR-CANE.	ARROWROOT.	PEANUTS.	TOBACCO.		VINES.		BANANAS.		PINEAPPLES.		ORANGES.	
						Wheat.	Oats	BARLEY.		Maize.	Rye.	Rice.	English.	Sweet.		Bearing.	Not Bearing.				Bearing.	Not Bearing.	Bearing.	Not Bearing.	Bearing.	Not Bearing.	Bearing.	Not Bearing.	Bearing.	Not Bearing.
								Malting.	Other.																					
South-Western Division.	Sq. mls.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.
Adavale	4,419	..	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Augathella	5,264	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bollon	5,987	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Charleville	9,023	..	45	..	45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	10	3
Cunnamulla	13,557	..	22	..	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	3	1
Eulo	5,476	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hungerford	3,917	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Quilpie	14,227	..	2	..	2	..	..	..	..	..	..	..	2	1	1	..	..	..	..	..	..	..	2	..	..	..	..	..	3	..
St. George	8,117	..	57	22	35	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Thargomindah	22,819	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total South-Western	92,806	..	133	22	111	..	..	..	..	..	..	..	2	1	1	..	..	..	..	..	..	..	4	..	..	..	..	..	16	4
Central Division.																														
Alpha	7,983	..	22	16	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..
Aramac	5,459	..	5	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barcaldine	3,862	..	10	..	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blackall	8,297	..	11	..	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clermont	15,011	..	257	53	204	..	..	..	..	10	..	..	..	..	2	128	30	..	..	..	..	..	..	..	..	..	..	..	6	1
Emerald	4,731	..	282	146	136	..	..	..	..	6	..	..	..	..	..	51	36	..	..	..	..	..	1	..	..	..	..	..	30	1
Longreach	12,117	..	21	1	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Muttaburra	12,688	..	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Springsure	10,230	..	145	2	143	..	..	..	..	11	..	..	..	..	1	45	70	..	..	..	..	..	1	..	..	..	..	..	2	..
Tambo	5,553	..	5	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taroom	5,448	20	28	10	18	..	..	..	..	..	9	..	..	..	1	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Central	91,379	20	789	228	561	..	..	..	..	27	9	..	..	..	4	230	136	..	..	..	..	..	2	..	..	..	..	..	42	2
Maranoa Division.																														
Mitchell	10,387	..	2,167	75	2,092	2,039	..	..	..	18	..	..	..	..	2	6	3	..	..	..	..	..	..	..	..	..	..	..	..	..
Roma	6,394	196	27,131	5,798	21,333	17,104	81	..	5	92	..	..	7	2	27	418	145	..	..	..	..	..	375	25	..	..	..	..	33	15
Surat	4,248	..	8	..	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1
Yeulba	591	..	71	45	26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Maranoa	21,620	196	29,377	5,918	23,459	19,143	81	..	5	110	..	..	7	2	29	424	148	..	..	..	..	..	376	25	..	..	..	..	34	16
Downs Division.																														
Allora	324	4	48,183	5,126	43,057	20,133	217	269	389	5,182	..	..	6	..	8	..	..	..	..	..	..	..	..	..	..	..	..	..	33	6
Chinchilla	2,311	16,105	3,688	784	2,904	193	..	..	..	209	..	..	..	..	2	2	..	..	..	..	..	..	7	1	..	..	..	..	6	3
Clifton	408	1,724	98,610	11,570	87,040	34,043	442	2,810	601	10,101	..	..	..	..	27	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Condamine	3,592	808	5,071	2,570	2,501	587	15	..	..	55	26	..	2	..	2	172	35	..	..	..	..	..	1	1	..	..	..	..	1	..
Dalby	6,797	57,161	42,014	4,499	37,515	14,941	297	108	87	873	..	..	7	..	24	18	14	..	..	..	..	..	1	..	..	..	..	..	2	2
Goondiwindi	4,385	..	955	633	322	70	..	..	..	3	..	..	8	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..
Inglewood	1,450	2,770	9,440	3,144	6,296	1,318	42	10	70	197	..	..	5	..	19	16	3	..	..	..	234	164	1	..	..	..	..	..	1	..
Killarney	234	1,638	19,485	1,740	17,745	5,848	312	154	51	5,443	..	..	46	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Oakey	1,173	17,709	109,409	13,007	96,402	38,235	1,254	425	342	8,134	..	..	113	1	261	13	12	..	..	..	..	..	5	..	..	..	..	..	3	1
Pittsworth	1,862	90	108,680	10,249	98,431	56,233	314	533	411	2,610	..	..	3	..	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stanthorpe	1,110	..	13,954	380	13,574	..	..	..	..	71	3	..	137	..	1	..	..	..	..	..	42	40	694	333	..	..	..	..	..	..
Texas	530	5	2,282	906	1,376	261	..	..	..	80	..	..	7	..	26	5	..	..	..	..	151	202	..	..	..	..	..	..	..	..
Toowoomba	291	629	56,423	8,007	48,416	10,713	499	1,183	359	5,926	10	..	236	2	14	..	..	..	..	62	..	..	10	..	..	..	..	..	20	4
Warwick	1,358	390	71,988	13,652	58,336	18,325	719	1,066	566	11,788	..	..	170	1	24	..	..	..	..	..	..	..	16	6	..	..	..	..	..	..
Total Downs	25,825	99,033	590,182	76,267	513,915	200,900	4,111	6,558	2,876	50,672	39	..	740	4	432	226	64	..	..	62	427	406	736	341	..	..	..	..	75	16
Grand Total 1934	670,500	869,777	1,512,591	215,972	1,296,619	221,729	4,566	6 600	3,004	160,607	75	..	11,666	2,271	12,272	43,397	34,350	303,926	835	7,501	2,081	504	1,517	409	7,027	3,296	4,603	981	2,836	585
Grand Total 1933	670,500	777,706	1,499,996	186,558	1,313,438	232,053	5,207	5,728	3,037	166,948	47	..	11,936	1,791	13,518	68,203	18,893	311,910	797	2,630	4,004	1,355	1,586	377	6,777	4,149	4,551	1,338	2,696	728
Increase, 1934	..	92,071	12,595	29,414	..	..	..	872	..	..	28	..	..	480	..	..	15,457	..	38	4,871	..	..	..	32	250	..	52	..	140	..
Decrease, 1934	..	..	..	..	16,819	10,324	641	..	33	6,341	..	..	270	..	1,246	24,806	..	7,984	..	..	1,923	851	69	..	..	853	..	357	..	143

Table No. XLIII.—*continued.*

SION.	OTHER FRUITS.																												VEGETABLES.									
	APPLES.		APRICOTS.		Cherries.	CUSTARD APPLES.		Figs.	Cape Gopsberries.	LEMONS.		NECTARINES.		Passion Fruit.	PAWPAWS.		PEACHES.		PEARS.		Persimmons.	PLUMS.		Quinces.	Strawberries.	Water-Melons.	MANGOES.		Small Orchards.	BEANS.		Cabbages and Cauliflowers.	Cucumbers.	Market Gardens.	Onions.	PEAS.		Tomatoes.	Turnips.
	Bearing.	Not Bearing.	Bearing.	Not Bearing.		Bearing.	Not Bearing.			Bearing.	Not Bearing.	Bearing.	Not Bearing.		Bearing.	Not Bearing.	Bearing.	Not Bearing.	Bearing.	Not Bearing.		Bearing.	Not Bearing.				Bearing.	Not Bearing.		Green.	Dried.					Green.	Dried.		
	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.
Moreton Division.																																						
Brisbane (A)	..	..	..	..	..	6	2	..	..	4	1	..	..	10	241	88	33	11	..	..	1	2	4	..	9	112	9	..	11	174	..	228	32	129	1	199	1	370	20
Brisbane (B)	..	..	..	..	1	13	..	14	..	..	1	..	..	..	71	6	..	6	..	..	2	..	1	..	1	..	1	..	44	12	1	28	7	27	..	10	..	54	7
Beaudesert	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	3
Caboolture	..	..	..	..	..	..	..	..	..	1	1	..	..	2	..	1	1	..	..	..	..	..	..	..	3	2	1	..	1	3	..	2	1	3	..	..	..	4	..
Cleveland	..	..	..	..	..	94	5	..	..	11	9	..	..	48	80	39	..	..	..	..	1	..	..	..	74	7	5	1	..	107	..	208	117	92	1	45	..	529	2
Crow's Nest	..	..	..	..	..	..	..	..	..	14	4	..	..	..	..	1	..	..	..	..	..	..	..	..	..	3	..	..	..	56	..	19	18	16	..	18	..	53	4
Dugandan	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	2	..	..	..	1	..	2	6
Esk	..	..	..	..	..	..	..	..	..	6	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	2	..	19	7	118	272	..	..	1	2
Gatton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	..	..	..	..	1	2
Goodna	..	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	11	..	..	..	1	3	2	..	9	1
Harrisville	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	8	..	1	..	5	..	6	..	1	..
Ipswich	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	1
Kilcoy	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	3	8	..	2	1	5	148	5	..	4	5
Laidley	..	..	..	..	..	..	..	..	..	3	6	..	..	20	2	2	..	..	..	..	1	..	..	..	..	..	17	1	18	34	..	69	14	2	..	93	4	91	7
Logan	..	..	..	..	..	50	..	..	..	3	6	..	..	20	2	2	..	..	..	..	1	..	..	..	..	..	17	1	18	34	..	69	14	2	..	93	4	91	7
Lowood	..	..	..	..	..	..	..	..	17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	15	..	..	..	..	1	25	..	26	..
Marburg	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31	..	1	..	4	125	8	1	6	..	..	7	..	7	..
Maroochy	..	..	..	..	..	2	..	..	..	2	1	..	..	1	1	..	..	..	..	..	..	..	..	..	1	35	2	..	..	10	..	35	7	5	..	29	..	23	1
Redcliffe	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	1	..	..	2	5	..	3	..
Rosewood	..	..	..	..	..	..	..	..	..	1	..	..	..	15	1	11	..	..	..	..	..	..	..	..	1	..	1	..	..	32	..	8	1	3	..	7	3	14	..
Southport	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	13	..	..	..	3
Toogoolawah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2
Woodford	..	..	..	..	..	1	..	1	..	..	..	..	..	..	36	23	..	..	..	..	..	..	..	..	9	..	..	..	..	9	..	4	5	17	..	18	..	60	3
Wynnum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..	..	2
Cooyar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..
Helidon	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Moreton	..	..	..	..	1	..	166	7	15	21	46	26	..	..	97	457	176	37	17	..	..	5	3	5	..	129	159	40	2	98	616	9	632	219	423	523	473	8	1,255	80
Wide Bay Division.																																						
Biggenden	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Bundaberg	..	..	..	..	..	4	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	5	..	..	2	..	6	..	3	1	2	..
Childers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	..	..	..	..	..	..	14	..	..	..	..	..
Eldsvold	..	..	..	..	..	..	..	..	..	18	4	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	50	1	..	..	..	3	..	..	..	3	..
Gayndah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25	..	..	..	..	..	..	..	..	..
Gin Gin	..	..	..	..	..	2	..	..	..	2	..	..	..	6	13	4	..	..	..	..	..	..	..	..	1	..	4	2	1	329	3	4	1	11	..	6	..	8	3
Gympie	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	5	..	..	..	..	..	..	9	1	..
Kilkivan	..	..	..	..	..	..	..	..	..	..	..	..	..	2	5	1	..	..	..	..	..	..	..	..	..	..	7	4	3	2	..	5	1	9	..	8	..	3	4
Maryborough	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mount Perry	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Nanango	..	..	..	1	..	..	..	..	..	1	..	..	..	..	17	8	..	2	1	..	..	..	1	1	..	..	2	..	2	49	..	2	..	..	..	2	..	23	3
Tiaro	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	5	..	..	9	7	21	2	1
Wienholt	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Wide Bay	..	..	..	1	..	..	8	1	..	..	21	4	..	..	8	37	14	2	1	..	..	..	1	1	..	2	7	26	2	91	391	3	19	2	46	9	26	31	42	11
Port Curtis Division.																																						
Banana	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	5	..
Gladstone	..	..	..	..	..	3	..	..	..	1	..	..	..	3	44	49	1	..	..	..	..	..	..	..	..	..	2	1	49	10	1	8	..	1	..	8	1	252	..
Monto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	11	..	1	2	..	..	13	..	22	2
Mount Morgan	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	1	..	..	..	1	..	..	2	16	20	3	4	18	1	18	2	67	1	16	..	50	3
Rockhampton	..	..	..	..	..	13	4	..	..	11	..	..	..	10	17	18	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. Lawrence	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Port Curtis	..	..	..	..	..	..	16	4	..	..	13	..	..	..	13	61	67	3	1	..	..	1	..	..	..	2	16	25	4	53	39	2	28	4	69	1	37	1	329	5

Table No. XLIII.—*continued.*

Division.	Other Fruits.																															Vegetables.									
	Apples.		Apricots.		Cherries.	Custard Apples.		Figs.	Cape Gooseberries.	Lemons.		Nectarines.		Passion Fruit.	Pawpaws.		Peaches.		Pears.		Persimmons.	Plums.		Quinces.	Strawberries.	Water-Melons.	Mangoes.		Small Orchards.	Beans.		Cabbages and Cauliflowers.	Cucumbers.	Market Gardens.	Onions.	Peas.		Tomatoes.	Turnips.
	Bearing.	Not Bearing.	Bearing.	Not Bearing.		Bearing.	Not Bearing.			Bearing.	Not Bearing.	Bearing.	Not Bearing.		Bearing.	Not Bearing.	Bearing.	Not Bearing.	Bearing.	Not Bearing.		Bearing.	Not Bearing.				Bearing.	Not Bearing.		Green.	Dried.					Green.	Dried.		
Edgecumbe Division.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.
Ayr	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	35	16	1	1	..	1	64	5	..	..	..	1,009	..
Bowen	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2	..	..	12	1	..	4	..	10	..	..	..	2	..
Cape River	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	3	2	..	2	2	13	..	1	..	20	2
Charters Towers	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	1	..	..	..	..	..	7	..	..	..	7	..
Collinsville	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..	..	..	..	..
Mackay	..	..	..	..	..	1	1	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	12	2	3	2	..	2	2	13	..	1	..	20	2
Proserpine	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	1	..	..	..	..	..	..	..	..	..	7	..
Ravenswood	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Townsville	..	..	..	..	..	6	..	..	..	1	..	..	..	..	24	2	..	..	..	..	..	..	..	4	..	4	2	2	16	..	9	9	10	1	..	..	98	..
Total Edgecumbe	..	..	..	..	..	8	1	..	..	6	1	..	..	..	24	2	1	..	..	..	..	..	..	4	7	68	21	18	20	..	19	75	53	1	1	..	1,137	2
Rockingham Division.																																							
Atherton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Cairns	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	1	..	..	..	13	..
Cardwell	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	1	..	..	..	..	..	26	..
Chillagoe	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Herberton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Ingham	..	..	..	..	..	2	..	..	..	5	1	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	12	2	..	..	..	1	..	4	..	..	..	1	..
Innisfail	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mareeba	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	4	..	..	..	3	..
Total Rockingham	..	..	..	..	..	2	..	..	..	5	1	..	..	2	5	1	..	..	..	..	..	1	..	..	..	..	13	2	3	7	..	10	..	7	..	..	..	43	..
York Peninsula Division.																																							
Coen	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cook	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Douglas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..
Somerset	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	4	4	..	..	..	..	..	40	..	..	..	..	..
Total York Peninsular	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	4	4	3	..	..	..	..	40	..	..	..	..	..
Carpentaria Division.																																							
Burke	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Camooweal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..
Cloncurry	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..	..	..	..	..
Croydon	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..
Etheridge	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	4	..	..	..	..	..
Hughenden	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	2	1	..	1	..
Julia Creek	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	..	..
Mount Isa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Norman	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..
Richmond	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Total Carpentaria	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	1	32	2	1	..	1	..
Central-Western Division.																																							
Boulia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..	..	..	..
Diamantina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..	..	..	..
Isisford	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jundah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Windorah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Winton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..	..	..	..	..
Total Central-Western	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	15	..	..	..	..	..	..

Table No. XLIII.—*continued.*

DIVISION.	OTHER FRUITS.																												VEGETABLES.									
	APPLES.		APRICOTS.		Cherries.	CUSTARD APPLES.		Figs.	Cape Gooseberries.	LEMONS.		NECTARINES.		Passion Fruit.	PAWPAWS.		PEACHES.		PEARS.		Persimmons.	PLUMS.		Quinces.	Strawberries.	Water-Melons.	MANGOES.		Small Orchards.	BEANS.		Cabbages and Cauliflowers.	Cucumbers.	Market Gardens.	Onions.	PEAS.[1]		Tomatoes.	Turnips.
	Bearing.	Not Bearing.	Bearing.	Not Bearing.		Bearing.	Not Bearing.			Bearing.	Not Bearing.	Bearing.	Not Bearing.		Bearing.	Not Bearing.	Bearing.	Not Bearing.	Bearing.	Not Bearing.		Bearing.	Not Bearing.				Bearing.	Not Bearing.		Green.	Dried.					Green.	Dried.		
South-Western Division.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac	Ac	Ac	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.
Adavale	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	3	..	..	..	..	..
Augathella	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bollon	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..
Charleville	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	4	1	..	..	1	..
Cunnamulla	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	..	..	1	..	..	..	..	2	..
Eulo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hungerford	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..
Quilpie	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
St. George	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	1	..	4	..	16	..	1	..	..
Thargomindah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total South-Western	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2	1	..	..	..	1	..	..	..	..	..	..	17	1	..	5	..	27	1	1	..	4	..
Central Division.																																						
Alpha	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..
Aramac	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..
Barcaldine	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	..	..	..	..	..
Blackall	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	..	..	..	..	..
Clermont	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	5	..	..	..	1	..
Emerald	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	1	..	..	..	2	..
Longreach	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	..	..	..	3	..	..	..	..	..
Muttaburra	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Springsure	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..
Tambo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..
Taroom	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Central	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	21	..	..	5	..	42	..	..	..	3	..
Maranoa Division.																																						
Mitchell	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Roma	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	1	..	..	1	..	3	..	..	..	1	..
Surat	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..	..	..	..	..
Yeulba	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..	..	..	..
Total Maranoa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	17	..	..	..	1	..
Downs Division.																																						
Allora	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..
Chinchilla	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clifton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	4	..	3	6	..	..	..	..
Condamine	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	1	..
Dalby	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	1	..	1	..	..	..	..	..	1	..
Goondiwindi	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	3	..	..	3	..	2	..	2	..	..	..
Inglewood	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	2	..	..	..
Killarney	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	..	..	..	1	..	..	..	..	..	..	..	3	..	10	1	8	2	2	..	7	..
Oakey	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pittsworth	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Stanthorpe	3,283	1,878	66	44	6	..	..	..	..	..	..	33	..	..	..	..	1,325	372	195	41	..	959	279	1	..	..	..	..	1	665	..	460	..	14	..	407	..	1,573	3
Texas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	..	..	..	1	..	..	..	..	12	..
Toowoomba	2	..	8	2	..	..	..	1	..	5	1	..	..	..	..	..	6	2	..	..	..	4	1	..	1	..	..	..	52	14	2	16	2	5	4	11	2	7	2
Warwick	165	44	33	6	..	..	..	..	..	..	..	1	..	..	..	..	14	2	9	..	..	29	8	..	..	..	..	..	..	49	..	17	1	..	4	19	..	20	3
Total Downs	3,451	1,922	108	52	6	..	..	2	..	7	2	34	..	..	..	..	1,350	377	204	41	..	994	288	1	1	..	..	..	70	733	2	513	5	30	20	439	2	1,625	8
Grand Total, 1934	3,451	1,922	109	53	6	200	13	17	21	105	34	34		120	585	261	1,397	397	204	41	6	1,001	294	1	138	189	176	35	377	1,808	16	1,234	306	801	557	978	42	4,440	106
Grand Total, 1933	3,488	1,711	97	54	4	231	15	12	21	111	35	47	..	118	632	257	1,398	361	227	43	6	1,054	310	8	126	261	178	30	375	1,407	8	1,257	285	833	773	876	112	4,430	111
Increase, 1934	..	211	12	..	2	..	..	5	..	..	..	..	..	2	..	4	..	36	..	..	..	..	..	..	..	12	..	5	2	401	8	..	21	..	..	102	..	10	..
Decrease, 1934	37	..	..	1	..	31	2	..	..	6	1	13	..	..	47	..	1	..	23	2	..	53	16	7	..	72	2	..	..	..	..	23	..	32	216	..	70	..	5

Table No. XLIII.—*continued.*

—	OTHER MISCELLANEOUS CROPS.														GREEN FORAGE.						HAY (ALL KINDS).					ESTIMATED VALUE OF FARM PROPERTY.		
	Broom Millet.	Canary Seed.	Cow Peas.	Cocoanuts.	Grass Seed.	Panicum Seed.	Lucerne Seed.	Mangel Wurzel.	Millet Seed.	COFFEE. Bearing.	COFFEE. Not Bearing.	Linseed.	Sunflower Seed.	Ginger.	Wheat.	Oats.	Sorghum	Lucerne.	Other.	Total.	Wheat	Oats.	Lucerne.	Other.	Total.	Unimproved Value of Land.	Value of Farm Buildings and Fences, &c., exclusive of Proprietors or Manager's Residence.	Number of Farms under Cultivation.
	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	£	£	No.
Moreton Division.																												
Brisbane (A)	1	..	2	..	..	..	..	2	..	..	..	..	..	..	121	219	610	107	1,595	2,652	10	15	44	11	80	295,092	143,043	662
Brisbane (B)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	129	153	253	41	537	1,113	..	3	55	8	66	102,189	119,620	229
Beaudesert	14	..	4	..	..	..	..	6	..	..	..	..	..	..	134	1,991	547	1,990	933	5,595	2	11	1,780	25	1,818	511,210	263,788	565
Caboolture	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	25	99	2	54	182	..	..	..	..	..	35,752	99,814	195
Cleveland	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	15	24	2	191	238	..	1	1	1	3	74,323	47,857	313
Crow's Nest	..	..	..	..	..	..	..	1	..	..	..	..	..	..	639	3,987	487	1,384	2,253	8,750	13	..	1,396	26	1,435	155,391	267,267	381
Dugandan	6	..	..	..	..	..	..	27	..	..	..	1	..	..	58	2,772	1,332	394	1,005	5,561	76	9	5,130	175	5,390	245,975	242,725	560
Esk	..	..	..	..	..	..	..	5	..	..	..	..	..	..	35	509	154	447	553	1,698	..	31	623	11	665	74,897	78,163	133
Gatton	11	..	..	..	..	..	..	8	..	..	..	..	..	..	284	1,534	1,403	442	1,375	5,038	365	581	4,661	52	5,659	189,368	174,456	483
Goodna	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	30	45	56	64	196	..	24	22	7	53	12,664	5,551	29
Harrisville	..	..	..	..	..	..	..	18	..	..	..	..	..	..	69	1,993	873	1,630	846	5,411	223	563	4,544	470	5,800	185,000	218,416	392
Ipswich	..	..	..	..	..	..	..	..	..	..	..	..	..	..	31	582	376	365	252	1,606	..	37	880	22	939	91,591	96,954	165
Kilcoy	..	..	..	..	..	..	..	44	..	..	..	..	..	..	19	512	95	556	250	1,432	..	46	214	1	261	118,234	75,140	154
Laidley	180	..	..	..	..	..	..	37	..	..	..	..	..	..	293	1,078	979	176	1,184	3,710	428	267	5,770	32	6,497	173,247	201,685	438
Logan	..	..	..	..	..	..	..	1	..	..	..	..	..	..	60	78	197	79	744	1,158	1	5	110	58	174	157,333	69,838	451
Lowood	..	..	..	..	..	..	..	27	..	..	..	..	..	..	65	1,323	890	18	1,029	3,325	50	96	2,351	26	2,523	131,966	97,089	297
Marburg	..	..	..	..	..	..	..	17	..	..	..	..	..	..	50	986	1,802	230	1,493	4,561	5	6	892	57	960	87,800	92,773	239
Maroochy	..	..	..	..	..	..	..	..	..	8	..	..	..	1	3	45	213	17	714	992	1	..	..	..	1	369,825	236,440	1,099
Redcliffe	..	..	..	..	..	..	..	..	..	..	..	..	..	..	86	273	560	85	1,290	2,294	..	3	19	1	23	156,346	159,702	290
Rosewood	..	..	..	..	..	..	..	13	..	..	..	..	..	..	69	1,518	1,191	444	1,268	4,490	..	28	2,425	388	2,841	157,259	255,268	335
Southport	..	..	..	..	..	..	..	..	..	..	..	..	..	..	61	204	63	10	332	670	..	..	22	3	25	223,325	196,407	470
Toogoolawah	..	..	..	..	..	..	..	45	..	..	..	..	..	..	50	1,678	732	1,096	489	4,045	..	9	3,705	32	3,746	163,130	251,077	282
Woodford	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	378	234	38	351	1,031	..	..	..	2	2	168,074	128,492	228
Wynnum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	18	77	3	196	301	..	4	..	..	4	27,162	30,236	77
Cooyar	..	..	..	..	..	..	..	5	..	..	..	..	..	..	188	1,180	101	240	841	2,550	..	..	353	8	361	64,227	78,303	123
Helidon	..	..	..	..	..	..	..	..	..	..	..	..	..	..	111	1,000	685	152	1,032	2,980	6	..	1,073	11	1,090	65,904	85,174	193
Total Moreton	212	..	6	..	..	..	..	256	..	8	..	1	..	1	2,601	24,081	14,022	10,004	20,871	71,579	1,180	1,739	36,070	1,427	40,416	4,037,284	3,715,278	8,783
Wide Bay Division.																												
Biggenden	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	1,105	262	62	356	1,803	..	..	228	14	242	95,673	114,216	284
Bundaberg	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	66	45	14	419	550	..	..	82	6	88	479,134	199,036	1,012
Childers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13	13	..	..	..	..	..	164,668	83,422	226
Eidsvold	..	..	..	..	..	..	..	1	..	..	..	..	..	..	88	342	275	142	290	1,137	..	2	90	8	100	102,139	86,830	158
Gayndah	32	..	151	..	..	..	..	5	..	..	..	..	..	..	36	2,640	2,371	758	2,012	7,817	12	16	556	65	649	182,316	271,237	533
Gin Gin	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13	41	..	127	181	..	2	78	2	82	125,214	84,219	289
Gympie	..	..	..	..	..	..	..	2	..	10	5	..	..	..	64	2,037	409	245	2,086	4,841	1	8	155	11	175	547,434	661,964	1,120
Kilkivan	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	281	44	41	83	456	..	..	424	28	452	44,155	88,202	91
Maryborough	..	..	..	..	..	..	..	..	..	..	..	..	..	..	52	43	39	66	291	491	2	20	253	47	322	141,383	88,144	508
Mount Perry	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	2	3	9	..	..	8	3	11	10,035	6,190	37
Nanango	29	..	145	..	..	..	..	5	..	..	..	..	..	..	700	11,827	921	2,415	7,618	23,481	..	221	3,731	45	3,997	360,184	496,678	828
Tiaro	..	..	..	..	..	..	..	4	..	..	..	..	..	..	49	195	19	106	119	488	1	6	203	8	218	123,294	117,473	275
Wiendolt	..	..	83	..	..	..	..	12	..	..	..	..	..	..	488	13,087	1,858	3,274	7,934	26,641	9	99	4,516	137	4,761	507,328	552,280	1,070
Total Wide Bay	63	..	379	..	..	..	..	29	..	10	5	..	..	..	1,508	31,640	6,284	7,125	21,351	67,908	25	374	10,324	374	11,097	2,882,957	2,849,891	6,431
Port Curtis Division.																												
Banana	..	..	..	..	..	..	..	..	..	..	..	..	..	..	261	110	17	36	19	443	44	130	42	15	231	14,078	14,148	74
Gladstone	..	..	6	..	..	..	..	..	..	..	..	..	..	..	32	255	93	111	496	987	..	11	286	80	377	158,780	180,419	353
Monto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	886	112	777	565	2,359	..	6	1,534	5	1,545	302,305	138,345	429
Mount Morgan	33	..	..	..	..	..	..	..	..	..	..	..	..	..	86	97	26	100	249	558	30	..	84	39	153	287,339	294,097	991
Rockhampton	80	..	..	..	12	..	..	2	..	..	..	..	20	..	24	84	219	93	420	840	44	98	594	354	1,090	253,266	274,352	640
St. Lawrence	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	..	10	..	..	77	..	77	2,459	2,580	15
Total Port Curtis	113	..	6	..	12	..	..	2	..	..	..	..	20	..	422	1,432	467	1,127	1,749	5,197	118	245	2,617	493	3,473	1,018,227	903,941	2,502

Table No. XLIII.—*continued.*

	Other Miscellaneous Crops.													Green Forage.						Hay (all kinds).					Estimated value of farm property.		
	Broom Millet.	Canary Seed.	Cow Peas.	Cocoanuts.	Grass Seed.	Panicum Seed.	Lucerne Seed.	Mangel Wurzel.	Millet Seed.	Coffee. Bearing.	Coffee. Not Bearing.	Linseed.	Sunflower Seed.	Ginger.	Wheat.	Oats.	Sorghum	Lucerne.	Other.	Total.	Wheat.	Oats.	Lucerne.	Other.	Total.	Unimproved Value of Land.	Value of Farm Buildings, Fences, &c., exclusive of Proprietor's or Manager's Residence.	Number of Farms under Cultivation.
Edgecumbe Division.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	£	£	No.
Ayr	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	350,318	132,313	631
Bowen	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	74	..	115	189	..	..	..	..	..	57,804	32,944	219
Cape River	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	648	616	8
Charters Towers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	11	29	44	..	..	6	..	6	660	8,582	43
Collinsville	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	1	1	348	790	9
Mackay	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	369	369	..	..	..	..	..	766,955	511,689	1,718
Proserpine	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24	24	..	..	..	..	..	113,507	98,575	366
Ravenswood	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Townsville	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	22	..	22	44	..	..	..	..	..	24,574	37,290	122
Total Edgecumbe	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	101	11	559	671	..	..	7	1	8	1,314,814	822,799	3,118
Rockingham Division.																												
Atherton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	6	16	31	359	426	3	..	39	..	42	305,671	202,597	359
Cairns	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	11	20	46	..	..	..	..	..	465,514	269,654	650
Cardwell	..	..	52	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	14	..	..	..	..	..	141,042	83,697	268
Chillagoe	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	90	2
Herberton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	5	..	..	5	14	15	8	1	..	24	36,031	33,860	45
Ingham	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27	27	..	..	..	..	..	218,656	189,438	503
Innisfail	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	302,301	243,744	619
Marceba	7	..	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24,151	158,489	253
Total Rockingham	7	..	65	..	..	..	..	..	..	..	..	..	..	..	18	11	31	42	425	527	18	8	40	..	66	1,493,366	1,181,569	2,699
York Peninsula Division.																												
Coen	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cook	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	1,178	1,120	12
Douglas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	55,952	52,766	197
Somerset	..	..	..	320	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	9	..	..	..	..	..	15,000	25	4
Total York Peninsula	..	..	..	320	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	12	..	..	..	..	..	72,130	53,911	213
Carpentaria Division.																												
Burke	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	90	160	2
Camooweal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Cloncurry	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	225	1,395	3
Croydon	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	61	2
Etheridge	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	175	5
Hughenden	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3,661	2,360	3
Julia Creek	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	35	..	1
Mount Isa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	5	671	2
Norman	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Richmond	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	160	..	2
Total Carpentaria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	4,182	4,822	23
Central-Western Division.																												
Boulia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2,120	2
Diamantina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Isisford	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	150	1
Jundah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Windorah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Winton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	470	719	5
Total Central-Western	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	502	2,989	8

Table No. XLIII.—*continued.*

—	Other Miscellaneous Crops.														Green Forage.						Hay (all kinds).					Estimated Value of Farm Property		
	Broom Millet.	Canary Seed.	Cow Peas.	Cocoanuts.	Grass Seed.	Panicum Seed.	Lucerne Seed.	Mangel Wurzel.	Millet Seed.	Coffee. Bearing.	Coffee. Not Bearing.	Linseed.	Sunflower Seed.	Ginger.	Wheat.	Oats	Sorghum	Lucerne	Other.	Total	Wheat	Oats.	Lucerne.	Other.	Total.	Unimproved Value of Land.	Value of Farm Buildings, Fences, &c., exclusive of Proprietor's or Manager's Residence.	Number of Farms Under Cultivation.
South-Western Division.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	Ac.	£	£	No.
Adavale	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Augathella	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50	180	2
Bollon	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Charleville	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	6	..	1	5	22	..	..	..	..	..	4,391	7,665	11
Cunnamulla	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	474	365	5
Eulo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hungerford	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Quilpie	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
St. George	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,998	1,280	9
Thargomindah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total South-Western	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	6	..	1	5	22	..	..	..	..	..	7,913	9,490	30
Central Division.																										650	500	3
Alpha	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Aramac	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	840	3,360	4
Barcaldine	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	225	4
Blackall	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	10	..	..	..	10	10	6,197	3,880	10
Clermont	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3,615	8,155	11
Emerald	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
Longreach	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Muttaburra	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	..	..	..	..	10	..	..	..	..	..	225	1,130	15
Springsure	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	320	3
Tambo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	2	..	..	..	..	..	7,378	4,490	2
Taroom	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Central	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	..	..	..	10	22	..	..	..	10	10	18,940	22,060	60
Maranoa Division.																												
Mitchell	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	8	16	..	..	..	16	1,450	2,450	24
Roma	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,215	342	271	15	657	2,500	313	15	9	159	496	129,155	157,962	244
Surat	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	2
Yeulba	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	..	..	..	..	17	..	..	..	..	..	2,775	2,299	8
Total Maranoa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,232	342	271	15	665	2,525	329	15	9	159	512	133,380	162,721	278
Downs Division.																												
Allora	..	..	898	..	..	81	289	..	..	..	..	..	..	6	..	1,459	2,586	3	2,970	4,904	11,922	88	..	3,173	354	3,615	306,631	187,318	318
Chinchilla	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	381	1,137	30	16	750	2,314	99	33	18	15	165	81,535	104,156	101
Clifton	..	..	4,547	..	..	163	1,884	9	..	155	..	..	5	31	..	5,951	4,446	7,157	4,933	3,324	25,811	177	200	5,873	151	6,401	456,642	373,584	539
Condamine	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	176	554	316	113	344	1,503	62	..	10	20	92	80,796	97,882	101
Dalby	..	..	686	..	..	..	..	..	..	6	..	..	5	..	..	4,903	8,681	1,753	262	4,026	19,625	241	6	396	170	813	292,348	364,732	428
Goondiwindi	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	100	..	..	6	29	135	66	..	3	19	88	16,506	8,850	24
Inglewood	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	987	1,252	1,130	42	345	3,756	25	20	318	88	451	40,450	81,438	117
Killarney	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	153	1,901	48	1,135	902	4,139	6	94	1,593	18	1,711	147,524	157,992	201
Oakey	..	..	871	..	..	428	..	..	2	127	..	..	..	..	..	8,480	14,675	3,045	3,461	12,974	42,635	331	117	2,907	179	3,534	515,426	455,564	807
Pittsworth	..	..	149	..	..	16	44	..	..	..	..	..	..	..	..	12,925	5,805	4,292	5,179	8,114	36,315	340	33	1,162	253	1,788	381,715	345,697	533
Stanthorpe	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	156	229	..	2	117	504	..	41	102	1	144	135,193	184,228	773
Texas	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	13	78	52	77	176	396	12	165	22	23	222	48,967	44,659	63
Toowoomba	..	..	755	..	..	18	318	..	..	60	..	..	..	..	..	2,912	7,198	622	5,240	6,722	22,694	246	195	4,836	106	5,383	448,413	376,843	668
Warwick	..	..	431	..	..	60	40	52	..	61	..	..	..	..	..	1,785	5,941	1,034	3,143	6,196	18,099	109	141	6,058	180	6,488	421,116	378,184	625
Total Downs	..	3	8,337	..	..	766	2,575	61	2	409	..	..	10	37	..	40,381	54,483	19,482	26,579	48,923	189,848	1,802	1,045	26,471	1,577	30,895	3,373,262	3,161,127	5,298
Grand Total, 1934	..	399	8,337	456	320	778	2,575	61	290	409	18	5	11	57	1	46,184	111,995	40,658	44,905	94,570	338,312	3,472	3,426	75,538	4 041	86,477	14,356,957	12,890,598	29,443
Grand Total, 1933	..	476	10,293	483	322	2,790	2,018	50	244	738	5	2	35	14	1	37,905	103,919	40,660	39,466	89,512	311,462	6,058	4,280	77,473	5,132	92,943	14,016,964	13,278,901	29,292
Increase, 1934	..	..	..	..	..	..	557	11	46	..	13	3	..	43	..	8,279	8,076	..	5,439	5,058	26,850	..	..	..	..	..	239,993	..	151
Decrease, 1934	..	77	1,956	27	2	2,012	..	..	..	329	..	..	24	..	..	..	..	2	..	..	..	2,586	854	1,935	1,091	6,466	..	387,403	..

Millet seed consists of Japanese 196 ac., French 118 ac., White 95 ac.

Table No. XLIV.

RETURN SHOWING THE GROSS PRODUCE OF PRINCIPAL CROPS RAISED IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE DURING THE YEAR 1934.

QUANTITY OF PRODUCE.

Divisions.	GRAIN CROPS.						POTATOES.			SUGAR-CANE.			HAY (all kinds.)				VINES.			
	Wheat.	Oats.	BARLEY.		Maize.	Rye.	Arrow-root (Tubers).	English.	Sweet.	Pumpkins.	Cotton.	Area Crushed.	Weight Obtained.	Tobacco (Cured Leaf.)	Wheat.	Oats.	Lucerne.	Total.	Grapes Gathered.	Bananas.	Pineapples.	Oranges.
			Malting.	Other.																		
Moreton Division.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	Tons.	Tons.	Lb.	Acres.	Tons.	Lb.	Tons.	Tons.	Tons.	Tons.	Lb.	Bunches.	Dozens.	Bushels.
Brisbane (A)	..	..	..	..	1,396	..	..	230	129	765	..	..	..	..	10	15	164	206	412,943	48,610	82,983	1,043
Brisbane (B)	..	..	..	..	276	..	..	24	3	31	..	..	..	..	..	5	258	273	9,550	3,622	37,054	667
Beaudesert	..	110	..	..	111,936	..	138	917	122	2,111	350	..	..	..	9	22	6,276	6,332	..	6,064	..	1,115
Caboolture	..	..	..	..	460	..	..	94	80	59	..	..	..	2,694	..	..	..	..	900	53,132	74,122	9,572
Cleveland	..	..	..	..	186	..	..	22	20	29	..	..	..	..	..	1	2	4	4,702	33,902	34,661	1,013
Crow's Nest	..	405	298	554	159,141	..	..	528	47	586	..	..	..	..	17	..	2,863	2,943	..	..	..	2,571
Dugandan	..	67	240	60	176,184	30	..	2,151	84	2,675	11,286	1	35	..	126	13	12,814	13,310	..	2,000	75	72
Esk	..	..	..	..	20,866	20	..	200	220	256	9,189	..	..	..	..	84	1,699	1,797	414	..	..	4,229
Gatton	..	..	..	..	150,602	15	..	2,015	1,010	5,464	132,231	..	..	..	490	866	8,696	10,142	..	..	..	11,495
Goodna	..	..	..	..	2,893	..	..	32	4	46	..	..	..	..	..	60	63	136	..	..	..	..
Harrisville	..	..	..	..	86,768	..	..	435	415	1,372	22,714	..	..	..	368	783	9,149	11,082	1,886	90	..	102
Ipswich	..	..	..	..	17,525	..	..	210	78	91	17,308	..	..	..	..	93	1,700	1,829	..	..	45,040	1,320
Kilcoy	..	..	..	..	21,811	..	188	148	325	358	..	..	..	..	..	34	534	571	..	29,723	..	70
Laidley	360	..	..	..	171,392	..	..	1,587	1,103	2,477	40,928	..	..	..	633	391	15,463	16,531	4,900	330	35	446
Logan	..	..	..	..	11,036	..	2,099	943	202	88	..	566	8,679	..	2	5	560	731	4,890	135,931	17,239	7,448
Loowood	..	..	..	..	102,170	..	..	1,818	575	2,140	32,818	..	..	..	78	137	4,996	5,260	190,500	..	2,530	2,200
Marburg	..	60	..	..	48,350	..	24	200	205	410	11,625	..	..	..	5	3	2,283	2,380	..	..	1,270	70
Maroochy	..	60	..	..	4,218	..	420	38	180	4	..	2,905	42,158	..	2	..	..	2	..	402,781	451,358	127,152
Redcliffe	..	..	..	..	6,359	..	..	208	221	384	..	14	259	..	..	12	81	95	7,832	96,888	43,547	1,415
Rosewood	..	..	..	..	46,568	..	14	369	188	678	4,037	..	..	..	..	22	5,631	6,419	..	..	..	..
Southport	60	..	..	..	10,846	120	6,595	413	124	86	..	27	473	..	..	..	88	114	..	468,355	3,800	7,444
Toogoolawah	..	..	..	..	92,158	..	9	581	1,256	2,096	22,102	..	..	..	..	12	7,281	7,348	4,110	1,000	..	39
Woodford	..	..	..	..	9,759	..	36	112	95	172	..	2	31	..	..	..	..	7	..	69,266	2,794	1,212
Wynnum	..	..	..	..	50	20	..	12	26	13	..	..	..	..	..	7	..	7	34,056	19,073	13,855	..
Cooyar	774	168	..	231	29,386	..	..	410	2	755	..	..	..	..	..	..	908	915	..	..	..	..
Helidon	..	..	..	..	23,841	..	..	870	554	1,555	7,750	..	..	..	2	..	2,078	2,099	..	..	..	1,730
Total Moreton	6,329	870	538	845	1,306,477	205	9,523	14,567	7,268	24,701	312,338	3,515	51,635	2,694	1,742	2,565	83,587	90,533	676,683	1,370,767	810,443	182,425
Wide Bay Division.																						
Biggenden	..	..	..	..	14,742	..	..	118	24	284	60,004	74	1,786	..	..	..	835	896	..	2,700	800	52
Bundaberg	..	..	..	..	9,049	..	17	103	92	7	1,290	17,736	418,198	3,980	..	..	319	337	290	36,933	3,120	5,320
Childers	..	..	..	..	235	..	..	2	..	..	3,060	9,423	200,215	..	..	..	..	..	..	500	500	3,650
Eidsvold	..	..	..	..	7,761	..	..	59	427	400	983,307	..	..	..	..	3	156	172	..	..	..	622
Gayndah	410	40	..	..	51,216	..	..	107	183	885	2,626,323	..	..	..	10	12	1,000	1,166	..	453	680	8,737
Gin Gin	..	..	..	..	4,764	..	..	36	3	4	14,998	4,442	68,872	..	..	2	343	348	..	100	1,760	460
Gympie	..	..	..	..	55,754	110	75	247	449	197	3,750	142	3,113	..	2	7	549	566	1,400	316,414	141,155	13,347
Kilkivan	..	..	..	..	11,141	..	..	50	27	98	22,802	..	..	..	..	..	811	886	..	1,200	..	135
Maryborough	..	..	..	..	2,191	..	..	185	14	22	856	3,312	51,103	..	5	32	685	802	10,681	10,502	37,404	75,849
Mount Perry	..	..	..	..	1,062	..	..	2	5	3	27,171	..	..	..	..	..	34	37	..	730	82	328
Nanango	2,003	1,937	..	360	451,565	..	31	899	362	1,102	15,437	..	..	..	..	130	7,874	8,080	2,190	..	..	469
Tiaro	..	..	..	..	11,288	..	16	244	59	70	2,475	1,293	22,442	..	1	16	830	861	3,360	8,490	3,500	3,535
Wienholt	4,035	3,189	..	144	462,049	300	50	1,919	215	1,257	306,319	..	..	..	16	92	9,928	10,148	..	..	150	660
Total Wide Bay	6,448	5,166	..	504	1,082,817	410	189	3,971	1,860	4,329	4,067,792	36,422	765,729	3,980	34	294	23,364	24,299	17,921	378,022	189,151	113,164
Port Curtis Division.																						
Banana	3,650	150	..	55	880	..	..	15	..	72	1,354,872	..	..	..	38	197	114	422	620	..	..	121
Gladstone	..	..	..	..	15,934	..	..	514	24	124	270,642	..	..	8,481	..	28	822	1,012	7,820	7,600	2,974	3,307
Monto	..	..	..	..	24,984	..	..	190	31	377	5,736,304	..	..	..	..	4	3,522	3,530	..	..	..	23
Mount Morgan	2,388	..	..	..	20,503	..	..	69	17	93	13,973,397	..	..	..	52	..	162	245	..	30	1,235	1,790.
Rockhampton	..	..	..	..	16,511	..	..	456	90	332	926,831	..	..	..	66	174	1,300	2,161	65,405	89,733	56,140	27,841
St. Lawrence	..	..	..	..	370	..	..	4	5	2	9,954	89	1,410	..	..	..	179	179	..	1,750	1,300	..
Total Port Curtis	6,038	150	..	55	79,182	..	..	1,248	167	1,000	22,272,000	89	1,410	8,481	156	403	6,099	7,549	73,845	99,113	61,649	33,082

Table No. XLIV.—*continued.*

RETURN SHOWING THE GROSS PRODUCE OF PRINCIPAL CROPS RAISED IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE DURING THE YEAR 1934—*continued.*

Divisions.	QUANTITY OF PRODUCE.																				
	GRAIN CROPS.						POTATOES.				SUGAR-CANE.			HAY (all kinds.)				VINES.			
	Wheat.	Oats.	BARLEY.		Maize.	Rye.	Arrow-root (Tubers).	English.	Sweet.	Pumpkins.	Cotton.	Area Crushed.	Weight Obtained.	Tobacco (Cured Leaf).	Wheat.	Oats.	Lucerne.	Total.	Grapes Gathered.	Bananas.	Pineapples.	Oranges.
			Malting.	Other.																	
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	Tons.	Tons.	Lb.	Acres.	Tons.	Lb.	Tons.	Tons.	Tons.	Tons.	Lb.	Bunches.	Dozens.	Bushels.
Edgecumbe Division.																					
Ayr	..	..	..	..	..	..	..	21	..	5	111	22,882	773,691	2,920	..	..	..	..	..	4,000	40	..
Bowen	..	..	..	..	1,411	..	..	107	2	332	22,681	178	5,185	71,506	..	..	..	..	..	1,369	26,333	1,567
Cape River	..	..	..	..	78	..	..	14	10	16	..	..	..	..	..	..	5	5	2,542	..	..	1,666
Charters Towers	..	..	..	..	..	..	..	8	2	5	..	..	..	18,646	..	..	39	39	41,819	..	..	3,154
Collinsville	..	..	..	..	..	..	..	..	..	4	9,856	..	..	6,240	..	..	..	4	..	..	..	..
Mackay	..	..	..	..	113	..	..	25	..	10	500	56,365	828,594	38,052	..	..	..	..	1,015	16,761	1,039	5,850
Proserpine	..	..	..	..	81	..	..	18	..	1	..	7,811	107,071	..	..	..	..	..	..	..	410	1,372
Ravenswood	..	..	..	..	..	..	..	..	..	..	..	..	..	5,824	..	..	..	..	..	..	..	230
Townsville	20	..	..	..	400	..	..	280	24	52	4,292	215	5,182	88,896	..	..	..	..	..	7,363	32,977	872
Total Edgecumbe	20	..	..	..	2,083	..	..	473	38	425	37,440	87,401	1,719,723	232,084	..	..	44	48	45,376	29,493	60,799	14,711
Rockingham Division.																					
Atherton	..	..	..	..	223,970	..	..	27	39	20	730	..	..	3,849	3	..	96	99	..	2,700	40	177
Cairns	..	..	..	..	90	..	..	21	6	..	391	28,566	478,219	4,710	..	..	..	..	..	16,360	4,170	5,163
Cardwell	..	..	..	..	144	..	..	..	..	2	2,071	8,753	185,133	..	..	..	..	..	..	8,022	433	11,955
Chillagoe	..	..	..	..	..	..	..	..	..	..	..	..	..	70	..	..	..	..	..	..	..	..
Herberton	..	..	..	..	4,310	..	..	11	..	1	..	..	..	3,246	20	11	6	37	8,737	..	..	19
Ingham	..	..	..	..	..	..	..	4	..	..	..	19,758	445,597	1,200	..	..	..	..	..	..	..	9,689
Innisfail	..	..	..	..	..	..	..	..	..	..	..	26,957	539,514	..	..	..	..	..	..	224	..	100
Mareeba	..	..	..	..	574	..	..	13	4	1	21,225	..	..	553,253	..	..	..	..	..	60	..	388
Total Rockingham	..	..	..	..	229,088	..	..	76	49	24	24,417	84,034	1,648,465	566,328	23	11	102	136	8,737	27,366	4,643	27,491
York Peninsula Division																					
Coen	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cook	..	..	..	..	975	..	..	..	..	1	..	..	..	1,300	..	..	..	..	..	459	..	298
Douglas	..	..	..	..	..	..	..	..	..	..	..	6,965	84,418	..	..	..	..	..	..	..	..	105
Somerset	..	..	..	..	..	..	..	..	180	48	..	..	..	..	..	..	..	..	..	680	146	..
Total York Peninsula	..	..	..	..	975	..	..	..	180	49	..	6,965	84,418	1,300	..	..	..	..	..	1,139	146	403
Carpentaria Division.																					
Burke	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Camooweal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cloncurry	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	105
Croydon	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Etheridge	..	..	..	..	860	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Hughenden	..	..	..	..	..	..	..	4	2	4	..	..	..	..	..	..	..	..	..	..	..	450
Julia Creek	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mount Isa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Norman	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Richmond	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Carpentaria	..	..	..	..	860	..	..	4	4	4	..	..	..	..	..	..	..	..	..	..	..	555
Central-Western Division.																					
Boulia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diamantina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Isisford	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jundah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Windorah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Winton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Central-Western	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

RETURN SHOWING THE GROSS PRODUCE OF PRINCIPAL CROPS RAISED IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE DURING THE YEAR 1934—*continued.*

QUANTITY OF PRODUCE.

Divisions.	GRAIN CROPS.							POTATOES.				SUGAR-CANE.			HAY (all kinds).				VINES.			
	Wheat.	Oats.	BARLEY. Malting.	BARLEY. Other.	Maize.	Rye.	Arrow-root (Tubers).	English.	Sweet.	Pump-kins.	Cotton.	Area Crushed.	Weight Obtained.	Tobacco (Cured Leaf).	Wheat.	Oats.	Lucerne.	Total.	Grapes Gathered.	Bananas.	Pineapples.	Oranges.
South-Western Division.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	Tons.	Tons.	Lb.	Acres.	Tons.	Lb.	Tons.	Tons.	Tons.	Tons.	Lb.	Bunches.	Dozens.	Bushels.
Adavale	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Augathella	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bollon	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Charleville	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,130	..	..	995
Cunnamulla	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,350	..	..	111
Eulo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hungerford	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Quilpie	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. George	..	..	..	..	..	..	..	5	1	2	..	..	..	..	..	..	..	..	11,200	..	..	235
Thargomindah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total South-Western	..	..	..	..	..	..	..	5	1	2	..	..	..	..	..	..	..	..	14,680	..	..	1,341
Central Division.																						140
Alpha	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Aramac	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barcaldine	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blackall	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	..	..	..	370
Clermont	..	..	..	..	144	..	..	..	..	1	31,326	..	..	..	..	..	..	..	260	..	..	5,834
Emerald	..	..	..	..	144	..	..	..	..	..	15,495	..	..	..	..	..	..	..	..	..	..	..
Longreach	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Muttaburra	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Springsure	..	..	..	..	206	..	..	..	..	2	4,941	..	..	..	..	..	..	..	322	..	..	37
Tambo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taroom	..	..	..	..	..	180	..	..	..	1	2,464	..	..	..	..	..	..	..	..	..	..	..
Total Central	..	..	..	..	..	494	180	..	..	..	4	54,226	..	..	..	..	..	..	6	582	..	..	6,381
Maranoa Division.																						
Mitchell	..	..	10,771	..	..	..	150	..	..	..	1	2,235	..	..	..	21	..	..	21	..	..	..	..
Roma	..	..	179,066	236	..	..	1,020	..	15	3	25	112,341	..	..	..	250	15	20	448	778,830	..	..	3,013
Surat	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yeulba	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	500	..	..	188
Total Maranoa	..	..	189,837	236	..	..	1,170	..	15	3	26	114,576	..	..	..	271	15	20	469	779,330	..	..	3,201
Downs Division.																						
Allora	..	..	407,086	4,247	5,064	5,340	142,345	..	..	16	..	21	..	..	..	57	..	2,790	3,179	..	..	..	2,500
Chinchilla	..	..	2,780	..	..	..	3,631	..	..	..	..	3	300	..	..	123	46	64	263	30,094	..	..	308
Clifton	..	..	618,769	9,164	52,783	7,790	239,161	..	..	..	..	92	..	..	..	164	216	4,660	5,159	1,400	..	..	..
Condamine	..	..	8,980	40	..	..	880	1,000	..	5	..	12	25,423	..	..	116	..	3	139	1,876	..	..	67
Dalby	..	..	278,541	6,223	1,932	2,241	15,793	..	..	12	..	50	9,700	..	..	259	7	624	1,047	1,960	..	..	178
Goondiwindi	..	..	690	..	..	..	36	..	..	7	..	5	..	..	..	24	..	3	53	..	..	..	72
Inglewood	..	..	24,592	465	33	505	2,237	..	..	10	..	9	3,688	..	..	32	9	282	426	5,412	..	..	28
Killarney	..	..	109,473	6,497	2,910	759	243,418	..	..	128	..	13	..	..	..	14	96	2,185	2,313	..	..	..	98
Oakey	..	..	784,398	22,615	6,183	4,559	217,445	..	..	233	2	720	1,083	..	..	370	74	3,844	4,399	14,173	..	..	215
Pittsworth	..	..	1,054,941	3,594	11,099	6,343	52,027	..	..	6	..	48	..	..	..	306	2	1,229	1,924	..	..	..	..
Stanthorpe	..	..	..	..	..	..	1,420	60	..	216	..	1	..	..	..	..	53	48	107	3,079,326	..	..	..
Texas	..	..	1,916	..	..	..	1,900	..	..	5	..	21	1,196	..	..	40,653	..	53	48	107	..	..	..
Toowoomba	..	..	208,637	10,297	23,177	7,595	155,950	72	..	359	4	14	..	..	..	87,398	13	153	20	211	..	..	..
Warwick	..	..	366,706	12,634	7,869	8,444	362,690	..	..	271	1	59	..	..	..	..	224	291	5,187	5,828	25,484	..	..	1,987
																	94	138	5,715	6,061	48,344	..	..	..
Total Downs	..	..	3,867,509	75,776	111,050	43,576	1,438,933	1,132	..	1,268	7	1,068	41,390	..	..	210,182	1,796	1,085	26,654	31,109	3,208,069	..	..	5,453
Grand Total, 1934	..	..	4,076,181	82,198	111,588	45,016	4,142,079	1,927	9,712	21,627	9,577	31,632	26,924,179	218,426	4,271,380	1,025,049	4,022	4,373	139,870	154,157	4,825,223	1,905,900	1,126,831	388,207
Grand Total, 1933	..	..	4,361,614	69,534	99,786	52,694	3,715,764	840	9,950	20,123	5,344	33,440	17,718,306	228,154	4,667,122	2,079,754	6,611	4,654	125,082	144,250	5,053,022	2,027,505	1,355,300	294,396
Increase, 1934	..	..	..	12,664	11,802	..	426,315	1,087	..	1,504	4,233	..	9,205,873	..	..	..	..	..	14,788	9,907	..	..	..	93,811
Decrease, 1934	..	..	285,433	..	..	7,678	..	..	238	..	..	1,808	..	9,728	395,742	1,054,705	2,589	281	..	..	227,799	121,605	228,469	..

Table No. XLIV.—*continued.*

RETURN SHOWING THE GROSS PRODUCE OF PRINCIPAL CROPS RAISED IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE DURING THE YEAR 1934—*continued.*

District.	OTHER FRUITS.																	
	Apples.	Apricots.	Cherries.	Custard Apples.	Figs.	Gooseberries (Cape).	Lemons.	Mangoes.	Nectarines.	Passion Fruit.	Pawpaws.	Peaches.	Pears.	Persimmons.	Plums.	Quinces.	Strawberries.	Melons.
Moreton Division.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Bushels.	Bushels.	Bushels.	Bushels.	Dozens.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Tons.
Brisbane (A)	..	..	..	414	..	..	369	874	..	474	40,425	2,317	..	43	99	..	10,120	268
Brisbane (B)	..	..	..	2,222	3,970	..	..	6	..	..	18,435	..	..	115	..	..	420	..
Beaudesert	..	..	..	..	..	..	206	..	..	..	..	..	..	..	..	..	..	..
Caboolture	..	..	..	..	..	..	6	40	..	139	..	21	..	..	..	..	1,400	5
Cleveland	..	..	..	10,933	..	..	1,155	102	..	1,594	20,024	..	..	..	..	..	150,609	12
Crow's Nest	..	..	..	..	..	..	1,262	..	..	..	..	..	..	..	..	..	..	..
Dugandan	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	62
Esk	..	..	..	..	..	..	1,630	..	..	..	..	..	..	..	..	..	..	..
Gatton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Goodna	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Harrisville	..	..	..	..	..	..	..	..	..	..	..	30	..	..	..	..	..	..
Ipswich	..	..	..	..	..	12,000	..	..	..	..	..	..	..	..	..	..	..	..
Kilcoy	..	..	..	..	..	..	..	58	..	..	..	..	..	..	..	..	..	..
Laidley	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Logan	..	..	..	12,826	..	..	780	527	..	1,470	180	..	..	..	..	..	..	..
Loowood	..	..	..	..	..	..	..	..	..	..	611	..	..	234	..	..	..	..
Marburg	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maroochy	..	..	..	..	..	39,760	..	40	..	..	..	..	..	..	..	..	..	..
Redcliffe	..	..	..	168	..	..	320	124	..	75	6,131	..	..	..	..	..	30,140	..
Rosewood	..	..	..	..	..	..	220	80	..	65	120	..	..	..	..	..	500	266
Southport	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Toogoolawah	..	..	..	..	..	..	96	79	..	4,909	70	..	..	..	..	..	1,000	..
Woodford	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wynnum	..	..	..	..	..	..	134	110	..	..	255	265	..	..	67	..	..	..
	..	..	..	165	100	..	..	..	..	..	10,976	..	..	..	..	..	7,358	..
Cooyar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Helidon	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Moreton	..	..	..	26,728	4,070	51,760	6,178	2,040	..	8,726	97,227	2,633	..	392	166	..	201.547	613

District.	VEGETABLES.									OTHER MISCELLANEOUS CROPS.												
	BEANS.		Cabbages and Cauliflowers.	Cucumbers.	Onions.	PEAS.		Tomatoes.	Turnips.	Broom Millet.	Canary Seed.	Cow Peas.	Cocoanuts.	Grass Seed.	Panicum Seed.	Lucerne Seed.	Mangel Wurzel.	Millet (Seed).	Peanuts.	Coffee.	Linseed.	Sunflower Seed	Ginger.
	Green.	Dried.				Green.	Dried.																
Moreton Division.	Bags.	Bush.	Dozen.	Dozen.	Cwt.	Bags.	Bush.	Bush.	Tons.	Lb. Straw.	Lb.	Bush.	Dozen.	Lb.	Lb.	Lb.	Tons.	Lb.	Lb.	Lb.	Lb.	Lb.	Tons.
Brisbane (A)	13,346	..	34,441	9,460	10	11,444	40	29,268	124	2,260	..	200	..	..	..	..	23	..	..	..	..	..	..
Brisbane (B)	1,077	50	6,939	1,721	..	906	..	5,260	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Beaudesert	..	..	150	..	..	..	..	95	17	16,480	..	19	..	..	..	..	32	..	..	..	..	..	..
Caboolture	192	..	258	120	..	..	..	600	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cleveland	10,758	..	67,102	119,619	20	3,434	..	110,360	3	..	..	..	..	..	..	..	..	..	21,104	..	..	..	..
Crow's Nest	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	..	..	..
Dugandan	6,005	..	5,967	7,573	..	1,911	..	6,618	15	7,956	..	..	..	..	..	..	115	..	..	..	540	..	..
Esk	..	..	348	..	..	80	..	100	14	..	..	..	..	..	..	..	16	..	..	..	..	..	..
Gatton	520	..	5,870	20	21,469	..	..	190	7	24,954	..	..	..	..	..	..	23	..	..	..	..	..	..
Goodna	..	..	1,160	200	..	..	..	100	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Harrisville	708	..	..	..	140	50	..	1,234	4	..	..	..	..	..	..	..	78	..	500	..	..	..	..
Ipswich	765	..	252	..	..	308	..	90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kilcoy	46	..	..	..	..	..	..	..	10	..	..	..	..	..	..	..	352	..	..	..	..	..	..
Laidley	492	..	100	100	11,531	340	..	363	20	186,236	..	..	..	..	..	..	243	..	..	..	..	..	..
Logan	2,599	..	24,685	4,103	..	6,575	6	23,256	39	..	..	..	..	..	..	..	8	..	1,880	..	..	..	..
Lowood	140	..	70	400	4,780	125	..	60	36	..	..	..	..	..	..	..	169	..	..	..	..	..	..
Marburg	955	..	..	..	30	2,281	..	1,625	..	..	..	..	..	..	..	..	80	..	..	..	..	..	..
Maroochy	11,343	379	70	3,557	..	512	..	1,292	..	..	..	..	..	..	..	..	..	..	30,905	2,916	..	..	1
Redcliffe	607	..	4,817	2,208	..	2,662	..	3,379	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rosewood	358	..	200	..	130	848	..	394	..	..	..	..	..	..	..	..	53	..	..	..	..	..	..
Southport	3,525	..	1,621	140	..	563	112	395	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Toogoolawah	..	..	..	..	519	..	..	..	8	..	..	..	..	..	..	..	493	..	..	..	..	..	..
Woodford	70	..	..	..	..	..	..	..	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wynnum	624	..	178	1,530	..	855	..	7,021	5	..	..	..	..	..	..	..	..	..	1,600	..	..	..	..
Cooyar	..	..	..	..	..	..	..	..	9	..	..	..	..	..	..	..	35	..	..	..	..	..	..
Helidon	..	..	..	..	47	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Moreton	54,130	429	154,228	150,751	38,676	32,894	158	191,700	368	237,886	..	219	..	..	..	..	1,724	..	55,989	2,916	540	..	1

Table No. XLIV.—*continued.*

District.	Other Fruits.																	
	Apples.	Apricots.	Cherries.	Custard Apples.	Figs.	Gooseberries (Cape).	Lemons.	Mangoes.	Nectarines.	Passion Fruit.	Pawpaws.	Peaches.	Pears.	Persimmons.	Plums.	Quinces.	Strawberries.	Melons.
Wide Bay Division.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Bushels.	Bushels.	Bushels.	Bushels.	Dozens.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Tons.
Biggenden	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bundaberg	..	..	..	574	..	..	..	..	..	..	86	..	..	..	..	..	1,120	..
Childers	..	..	..	..	..	..	..	3,000	..	..	..	..	..	..	..	..	..	..
Eidsvold	..	..	..	..	..	..	2,111	..	..	..	153	..	..	..	..	..	..	..
Gayndah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gin Gin	..	..	..	53	..	..	90	713	..	300	7,093	..	..	..	..	..	600	..
Gympie	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kilkivan	..	..	..	102	..	..	..	32	..	200	1,307	..	..	..	..	..	..	43
Maryborough	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mount Perry	..	..	..	..	..	..	37	..	..	..	..	108	..	..	53	..	..	..
Nanango	..	60	..	42	..	..	..	191	..	..	4,689	..	..	..	..	..	..	..
Tiaro	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wienholt	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Wide Bay	..	60	..	771	..	..	2,238	3,936	..	500	13,328	108	..	..	53	..	1,720	43

Districts.	Vegetables.									Other Miscellaneous Crops.													
	Beans.		Cabbages and Cauliflowers.	Cucumbers.	Onions.	Peas.		Tomatoes.	Turnips.	Broom Millet.	Canary Seed.	Cow Peas.	Cocoanuts.	Grass Seed.	Panicum Seed.	Lucerne Seed.	Mangel Wurzel.	Millet (Seed).	Peanuts.	Coffee.	Linseed.	Sunflower Seed.	Ginger.
	Green.	Dried.				Green.	Dried.																
Wide Bay Division.	Bags.	Bush.	Dozen.	Dozen.	Cwt.	Bags.	Bush.	Bush.	Tons.	Lb. Straw.	Lb.	Bush.	Dozen.	Lb.	Lb.	Lbs.	Tons.	Lb.	Lb.	Lb.	Lb.	Lb.	Tons.
Biggenden	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12,613	..	..	..	..
Bundaberg	..	..	400	..	..	140	30	60	..	..	..	..	..	..	..	..	..	..	1,000	..	..	..	..
Childers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Eidsvold	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	..	..	..	..	..	..
Gayndah	20	..	..	..	..	..	..	659	..	39,374	..	1,140	..	..	..	..	23	..	33,320	..	..	..	..
Gin Gin	..	..	..	..	..	..	..	..	..	2,484	..	..	..	..	..	..	..	..	..	..	..	..	..
Gympie	27,332	200	510	310	..	495	..	703	31	..	..	..	..	..	..	..	4	..	4,500	10,850	..	..	..
Kilkivan	364	..	..	..	..	..	150	157	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maryborough	54	..	1,090	50	..	283	..	160	9	..	..	..	..	..	..	..	..	..	18,030	..	..	..	..
Mount Perry	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3,360	..	..	..	..
Nanango	..	..	18	..	..	..	..	..	..	29,664	..	838	..	..	..	..	25	..	4,056,258	..	..	..	..
Tiaro	5,562	..	330	..	..	173	..	1,236	9	..	..	..	..	..	..	..	20	..	2,950	..	..	..	..
Wienholt	380	..	2,056	..	608	465	555	300	6	..	..	538	..	..	..	..	43	..	3,077,682	..	..	..	..
Total Wide Bay	33,712	200	4,404	360	608	1,556	735	3,275	55	71,522	..	2,516	..	..	..	..	130	..	7,209,713	10,850	..	..	..

Table No. XLIV.—*continued.*

District.	Other Fruits.																	
	Apples.	Apricots.	Cherries.	Custard Apples.	Figs.	Gooseberries (Cape).	Lemons.	Mangoes.	Nectarines.	Passion Fruit.	Pawpaws.	Peaches.	Pears.	Persimmons.	Plums.	Quinces.	Strawberries.	Melons.
Port Curtis Division.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Bushels.	Bushels.	Bushels.	Bushels.	Dozens.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Tons.
Banana	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gladstone	..	..	..	149	..	..	243	690	..	76	6,095	12	..	..	..	..	..	..
Monto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mount Morgan	..	..	..	..	..	..	18	183	..	..	..	5	..	..	..	..	..	..
Rockhampton	..	..	..	613	..	..	1,861	1,772	..	1,482	2,750	12	..	1,220	..	..	778	25
St. Lawrence	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Port Curtis	..	..	..	762	..	..	2,122	2,645	..	1,558	8,845	29	..	1,220	..	..	778	25

District.	Vegetables.									Other Miscellaneous Crops.														
	Beans.		Cabbages and Cauliflowers.	Cucumbers.	Onions.	Peas.		Tomatoes.	Turnips.	Broom Millet.	Canary Seed.	Cow Peas.	Cocoanuts.	Grass Seed.	Panicum Seed.	Lucerne Seed.	Mangel Wurzel.	Millet (Seed).	Peanuts.	Coffee.	Linseed.	Sunflower Seed.	Ginger.
	Green.	Dried.				Green.	Dried.																
Port Curtis Division.	Bags.	Bush.	Dozen.	Dozen.	Cwt.	Bags.	Bush.	Bush.	Tons.	Lb. Straw.	Lb.	Bush.	Dozen.	Lb.	Lb.	Lb.	Tons.	Lb.	Lb.	Lb.	Lb.	Lb.	Tons.
Banana	..	..	200	..	..	..	..	1,200	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gladstone	1,546	20	16,684	..	..	746	262	16,086	..	..	..	140	..	..	..	..	..	..	1,000	..	..	..	..
Monto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mount Morgan	427	..	341	272	..	780	..	2,016	8	38,500	..	..	..	..	..	..	..	..	21,218	..	..	..	..
Rockhampton	1,888	60	5,180	1,695	60	950	..	3,773	14	82,186	..	..	..	5,520	..	..	20	..	434,586	..	..	64,995	..
St. Lawrence	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Port Curtis	3,861	80	22,405	1,967	60	2,476	262	23,075	22	120,686	..	140	..	5,520	..	..	20	..	456,804	..	..	64,995	..

Table No. XLIV.—*continued.*

District.	Other Fruits.																	
	Apples.	Apricots.	Cherries.	Custard Apples.	Figs.	Gooseberries. (Cape)	Lemons.	Mangoes.	Nectarines.	Passion Fruit.	Pawpaws.	Peaches.	Pears.	Persimmons.	Plums.	Quinces.	Strawberries.	Melons.
Edgecumbe Division.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Bushels.	Bushels.	Bushels.	Bushels.	Dozens.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Tons.
Ayr	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
Bowen	..	..	..	..	..	..	24	7,467	..	..	..	..	..	..	..	..	..	11
Cape River	..	..	..	..	..	..	148	..	..	..	..	5	..	..	..	..	..	20
Charters Towers	..	..	..	..	..	..	61	60	..	..	..	..	..	..	..	..	..	..
Collinsville	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
Mackay	..	..	..	83	..	..	176	2,344	..	..	..	..	..	..	..	..	..	..
Proserpine	..	..	..	96	..	..	..	1,885	..	..	..	..	..	..	..	..	..	..
Ravenswood	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	860	..
Townsville	..	..	..	240	..	..	56	969	..	..	12,238	..	..	..	..	..	..	..
Total Edgecumbe	..	..	..	419	..	..	465	12,725	..	..	12,238	5	..	..	..	..	860	51

District.	Vegetables.									Other Miscellaneous Crops.														
	Beans.		Cabbages and Cauliflowers.	Cucumbers.	Onions.	Peas.		Tomatoes.	Turnips.	Broom Millet.	Canary Seed.	Cow Peas.	Cocoanuts.	Grass Seed.	Panicum Seed.	Lucerne Seed	Mangel Wurzel.	Millet (Seed).	Peanuts.	Coffee.	Linseed.	Sunflower Seed.	Ginger.
	Green.	Dried.				Green.	Dried.																
Edgecumbe Division,	Bags.	Bush.	Dozen.	Dozen.	Cwt.	Bags.	Bush.	Bush.	Tons.	Lb. Straw.	Lb.	Bush.	Dozen.	Lb.	Lb.	Lb.	Tons.	Lb.	Lb.	Lb.	Lb.	Lb.	Tons.
Ayr	..	..	38	..	..	..	..	25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bowen	70	..	620	19,800	..	..	..	74,465	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cape River	..	..	657	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Charters Towers	600	..	820	..	..	..	..	220	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Collinsville	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mackay	213	..	162	165	..	52	..	1,100	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Proserpine	..	..	..	..	..	..	..	610	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ravenswood	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Townsville	3,740	..	679	1,575	43	..	..	13,344	..	1,560	..	..	..	..	..	..	2	..	840	..	..	..	..
Total Edgecumbe	4,623	..	2,976	21,540	43	52	..	89,764	50	1,560	..	..	..	..	..	..	2	..	840	..	..	..	..

Table No. XLIV.—*continued.*

District.	Other Fruits.																	
	Apples.	Apricots.	Cherries.	Custard Apples.	Figs.	Gooseberries (Cape).	Lemons.	Mangoes.	Nectarines.	Passion Fruit.	Pawpaws.	Peaches.	Pears.	Persimmons.	Plums.	Quinces.	Strawberries.	Melons.
Rockingham Division. ..	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Bushels.	Bushels.	Bushels.	Bushels.	Dozens.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Tons.
Atherton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cairns	..	..	..	..	..	..	..	..	..	..	274	..	..	..	..	..	..	..
Cardwell	..	..	..	..	..	..	..	..	..	137	292	..	..	..	..	..	..	..
Chillagoe	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Herberton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19	..	..	..
Ingham	..	..	..	189	..	..	2,555	7,959	..	..	478	..	..	..	..	..	..	..
Innisfail	..	..	..	..	..	..	..	69	..	..	..	..	..	..	..	..	..	..
Mareeba	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Rockingham ..	..	..	..	189	..	..	2,555	8,028	..	137	1,044	..	..	..	19	..	..	..

District.	Vegetables.									Other Miscellaneous Crops.													
	Beans.		Cabbages and Cauliflowers.	Cucumbers.	Onions.	Peas.		Tomatoes.	Turnips.	Broom Millet.	Canary Seed.	Cow Peas.	Cocoanuts.	Grass Seed.	Panicum Seed.	Lucerne Seed.	Mangel Wurzel.	Millet (Seed).	Peanuts.	Coffee.	Linseed.	Sunflower Seed.	Ginger.
	Green.	Dried.				Green.	Dried.																
Rockingham Division.	Bags.	Bush.	Dozen.	Dozen.	Cwt.	Bags.	Bush.	Bush.	Tons.	Lb. Straw.	Lb.	Bush.	Dozen.	Lb.	Lb.	Lb.	Tons.	Lb.	Lb.	Lb.	Lb.	Lb.	Tons.
Atherton	150	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	433,054	..	..	..	..
Cairns	..	..	1,695	..	..	..	..	730	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cardwell	258	..	88	..	..	..	..	2,227	..	..	..	207	..	..	..	..	..	..	..	..	..	..	..
Chillagoe	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Herberton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4,480	..	..	..	..
Ingham	..	..	50	..	..	..	..	100	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Innisfail	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mareeba	..	..	565	..	..	..	..	80	..	7,700	..	100	..	..	..	..	..	..	256,085	..	..	..	..
Total Rockingham	408	..	2,398	..	..	..	..	3,137	..	7,700	..	307	..	..	..	..	..	..	693,619	..	..	..	..

Table No. XLIV.—*continued.*

District.	Other Fruits.																	
	Apples.	Apricots.	Cherries.	Custard Apples.	Figs.	Gooseberries (Cape).	Lemons.	Mangoes.	Nectarines.	Passion Fruit.	Pawpaws.	Peaches.	Pears.	Persimmons.	Plums.	Quinces	Strawberries.	Melons.
York Peninsula Division.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Bushels.	Bushels.	Bushels.	Bushels.	Dozens.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Tons.
Coen	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cook	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Douglas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Somerset	..	..	..	..	..	..	..	759	..	..	560	..	..	..	..	..	..	..
Total York Peninsula ..	..	..	..	..	..	..	..	759	..	..	560	..	..	..	..	..	..	..

District.	Vegetables.									Other Miscellaneous Crops.													
	Beans.		Cabbages and Cauliflowers.	Cucumbers.	Onions.	Peas.		Tomatoes.	Turnips.	Broom Millet.	Canary Seed.	Cow Peas.	Cocoanuts.	Grass Seed.	Panicum Seed.	Lucerne Seed.	Mangel Wurzel.	Millet (Seed).	Peanuts.	Coffee.	Linseed.	Sunflower Seed.	Ginger.
	Green.	Dried.				Green.	Dried.																
York Peninsula	Bags.	Bush.	Dozen.	Dozen.	Cwt.	Bags.	Bush.	Bush.	Tons.	Lb. Straw.	Lb.	Bush.	Dozen.	Lb.	Lb.	Lb.	Tons.	Lb.	Lb.	Lb.	Lb.	Lb.	Tons.
Coen	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cook	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	52,320	..	..	..	..
Douglas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Somerset	..	..	..	..	..	..	..	..	..	..	..	..	6,500	..	..	..	..	..	..	..	..	..	..
Total York Peninsula	..	..	..	..	..	..	..	..	..	..	..	..	6,500	..	....	..	..	..	52,320	..	..	..	..

Table No. XLIV.—*continued.*

District.	Other Fruits.																	
	Apples.	Apricots.	Cherries.	Custard Apples.	Figs.	Gooseberries (Cape).	Lemons.	Mangoes.	Nectarines.	Passion Fruit.	Pawpaws.	Peaches.	Pears.	Persimmons.	Plums.	Quinces.	Strawberries.	Melons.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Bushels.	Bushels.	Bushels.	Bushels.	Dozens.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Tons.
Carpentaria Division.																		
Burke	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Camooweal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cloncurry	..	..	..	..	..	..	70	..	..	..	..	..	..	..	..	..	..	..
Croydon	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Etheridge	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hughenden	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Julia Creek	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mount Isa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Norman	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Richmond	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Carpentaria	..	..	..	..	..	..	70	..	..	..	..	..	..	..	..	..	..	..

District.	Vegetables.									Other Miscellaneous Crops.													
	Beans.		Cabbages and Cauliflowers.	Cucumbers.	Onions.	Peas.		Tomatoes.	Turnips.	Broom Millet.	Canary Seed.	Cow Peas.	Cocoanuts.	Grass Seed.	Panicum Seed.	Lucerne Seed.	Mangel Wurzel.	Millet (Seed).	Peanuts.	Coffee.	Linseed.	Sunflower Seed.	Ginger.
	Green.	Dried.				Green.	Dried.																
	Bags.	Bush.	Dozen.	Dozen.	Cwt.	Bags.	Bush.	Bush.	Tons.	Lb. Straw.	Lb.	Bush.	Dozen.	Lb.	Lb.	Lb.	Tons.	Lb.	Lb.	Lb.	Lb.	Lb.	Tons.
Carpentaria Division.																							
Burke	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Camooweal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cloncurry	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Croydon	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Etheridge	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hughenden	3	..	..	150	45	25	..	25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Julia Creek	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mount Isa	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Norman	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Richmond	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Carpentaria	3	..	..	150	45	25	..	25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Table No. XLIV.—*continued.*

District.	Other Fruits.																	
	Apples.	Apricots.	Cherries.	Custard Apples.	Figs.	Gooseberries (Cape).	Lemons.	Mangoes.	Nectarines.	Passion Fruit.	Pawpaws.	Peaches.	Pears.	Persimmons.	Plums.	Quinces.	Strawberries.	Melons.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Bushels.	Bushels.	Bushels.	Bushels.	Dozens.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Tons.
Central-Western Division.																		
Boulia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diamantina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Isisford	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jundah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Windorah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Winton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Central-Western ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Districts.	Vegetables.									Other Miscellaneous Crops.													
	Beans.		Cabbages and Cauliflowers.	Cucumbers.	Onions.	Peas.		Tomatoes.	Turnips.	Broom Millet.	Canary Seed.	Cow Peas.	Cocoanuts.	Grass Seed.	Panicum Seed.	Lucerne Seed.	Mangel Wurzel.	Millet (Seed).	Peanuts.	Coffee.	Linseed.	Sunflower Seed.	Ginger.
	Green.	Dried.				Green.	Dried.																
	Bags.	Bush.	Dozen.	Dozen.	Cwt.	Bags.	Bush.	Bush.,	Tons.	Lb. Straw.	Lb.	Bush.	Dozen.	Lb.	Lb.	Lb.	Tons.	Lb.	Lb.	Lb.	Lb.	Lb.	Tons.
Central-Western Division.																							
Boulia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diamantina	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Isisford	..	..	200	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jundah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Windorah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Winton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Central-Western	..	..	200	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Table No. XLIV.—*continued.*

District.	Other Fruits.																	
	Apples.	Apricots.	Cherries.	Custard Apples.	Figs.	Gooseberries (Cape).	Lemons.	Mangoes.	Nectarines.	Passion Fruit.	Pawpaws.	Peaches.	Pears.	Persimmons.	Plums.	Quinces.	Strawberries.	Melons.
South-Western Division.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Bushels.	Bushels.	Bushels.	Bushels.	Dozens.	Dozens.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Tons.
Adavale	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Augathella	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bollon	..	..	..	..	..	..	130	..	..	..	..	..	..	..	9	..	..	..
Charleville	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cunnamulla	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Eulo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hungerford	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Quilpie	..	..	..	..	..	..	..	..	..	..	..	151	..	..	..	..	..	..
St. George	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Thargomindah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total South-Western	..	..	..	..	..	..	130	..	..	..	..	151	..	..	9	..	..	..

Districts.	Vegetables.									Other Miscellaneous Crops.														
	Beans.		Cabbages and Cauliflowers.	Cucumbers.	Onions.	Peas.		Tomatoes.	Turnips.	Broom Millet.	Canary Seed.	Cow Peas.	Cocoanuts.	Grass Seed.	Panicum Seed.	Lucerne Seed.	Mangel Wurzel.	Millet (Seed).	Peanuts.	Coffee.	Linseed.	Sunflower Seed.	Ginger.
	Green.	Dried.				Green.	Dried.																	
South-Western Division.	Bags	Bush.	Dozen.	Dozen.	Cwt.	Bags	Bush	Bush.	Tons.	Lb. Straw.	Lb.	Bush.	Dozen.	Lb.	Lb	Lb.	Tons	Lb.	Lb.	Lb.	Lb.	Lb.	Tons.
Adavale	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Augathella	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bollon	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Charleville	..	..	..	..	40	..	..	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cunnamulla	..	..	32	..	..	..	..	56	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Eulo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hungerford	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Quilpie	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. George	50	..	430	..	..	45	..	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Thargomindah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total South-Western	50	..	462	..	40	45	..	167	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Table No. XLIV.—*continued.*

District.	Other Fruits.																	
	Apples.	Apricots.	Cherries.	Custard Apples.	Figs.	Gooseberries (Cape).	Lemons.	Mangoes.	Nectarines.	Passion Fruit.	Pawpaws.	Peaches.	Pears.	Persimmons.	Plums.	Quinces.	Strawberries.	Melons.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Bushels.	Bushels.	Bushels.	Bushels.	Dozens.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Tons.
Central Division.																		
Alpha	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Aramac	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barcaldine	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blackall	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clermont	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Emerald	..	..	..	..	..	..	356	..	..	..	..	..	..	..	..	..	..	..
Longreach	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Muttaburra	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Springsure	..	..	..	..	..	..	..	..	..	..	..	5	..	..	..	..	..	..
Tambo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taroom	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Central-Western	..	..	..	..	..	..	356	..	..	..	..	5	..	..	..	..	..	..
Maranoa Division.																		
Mitchell	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..	..	..
Roma	..	..	..	..	..	..	..	..	..	..	..	59	..	..	..	..	..	..
Surat	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yeulba	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Maranoa	..	..	..	..	..	..	..	..	..	..	..	59	..	..	8	..	..	..

District.	Vegetables.									Other Miscellaneous Crops.														
	Beans.		Cabbages and Cauliflowers.	Cucumbers.	Onions.	Peas.		Tomatoes.	Turnips.	Broom Millet.	Canary Seed.	Cow Peas.	Cocoanuts.	Grass Seed.	Panicum Seed.	Lucerne Seed.	Mangel Wurzel.	Millet (Seed).	Peanuts.	Coffee.	Linseed.	Sunflower Seed.	Ginger.
	Green.	Dried.				Green.	Dried.																	
	Bags.	Bush.	Dozen.	Dozen.	Cwt.	Bags.	Bush.	Bush.	Tons.	Lb. Straw.	Lb.	Bush.	Dozen.	Lb.	Lb.	Lb.	Tons.	Lb.	Lb.	Lb.	Lb.	Lb.	Tons.
Central Division.																							
Alpha	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Aramac	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barcaldine	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blackall	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Clermont	..	..	55	..	..	..	..	60	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Emerald	..	..	134	..	..	..	..	500	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Longreach	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Muttaburra	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Springsure	..	..	36	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tambo	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taroom	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Central-Western	..	..	225	..	..	..	..	560	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maranoa Division.																								
Mitchell	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Roma	..	..	60	..	..	..	..	172	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Surat	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yeulba	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total Maranoa	..	..	60	..	..	..	..	172	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Table No. XLIV.—*continued.*

District.	Other Fruits.																	
	Apples.	Apricots.	Cherries.	Custard Apples.	Figs.	Gooseberries (Cape).	Lemons.	Mangoes.	Nectarines.	Passion Fruit.	Pawpaws.	Peaches.	Pears.	Persimmons.	Plums.	Quinces.	Strawberries.	Melons.
Downs Division.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Bushels.	Bushels.	Bushels.	Bushels.	Dozens.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Quarts.	Tons.
Allora	..	..	..	..	..	..	..	..	..	..	..	36	..	..	..	..	..	..
Chinchilla	..	..	..	..	32	..	..	..	..	..	..	..	..	..	..	..	..	..
Clifton	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Condamine	..	..	..	..	..	..	..	..	..	..	..	54	..	..	103	..	..	..
Dalby	..	..	..	..	..	..	20	..	..	..	..	..	..	..	..	..	..	..
Goondiwindi	..	..	..	..	..	..	..	..	..	..	..	57	..	..	..	..	..	..
Inglewood	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Killarney	..	..	15	51	..	..	55	..	..	..	..	83	..	..	37	..	..	..
Oakey	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pittsworth	..	..	275,613	4,821	419	..	..	..	1,873	..	..	95,212	18,886	..	71,635	137	..	..
Stanthorpe	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Texas	..	..	..	..	..	..	..	..	..	..	..	301	..	..	323	..	100	..
Toowoomba	..	..	160	564	..	..	432	..	..	..	..	809	510	..	1,595	..	..	..
Warwick	..	..	9,105	1,496	..	..	..	..	77	..	..	..	..	..	..	..	..	..
Total Downs	..	..	284,893	6,932	419	..	61	..	507	..	1,950	..	..	96,552	19,396	..	73,693	137	100	..
Grand Total, 1934	..	..	284,893	6,992	419	28,869	4,131	51,760	14,621	30,133	1,950	10,921	133,242	99,542	19,396	1,612	73,948	137	205,005	732
Grand Total, 1933	..	..	298,372	7,145	241	28,846	61	3,565	13,932	11,126	3,519	9,936	145,177	104,894	21,542	307	80,391	602	158,732	678
Increase, 1934	..	..	..	..	178	23	4,070	48,195	689	19,007	..	985	..	..	..	1,305	..	..	46,273	54
Decrease, 1934	..	..	13,479	153	..	..	..	..	..	..	1,569	..	11,935	5,352	2,146	..	6,443	465	..	..

District.	Vegetables.									Other Miscellaneous Crops.													
	Beans.		Cabbages and Cauliflowers.	Cucumbers.	Onions.	Peas.		Tomatoes.	Turnips.	Broom Millet.	Canary Seed.	Cow Peas.	Cocoanuts.	Grass Seed.	Panicum Seed.	Lucerne Seed.	Mangel Wurzel.	Millet (Seed).	Peanuts.	Coffee.	Linseed.	Sunflower Seed.	Ginger.
	Green.	Dried.				Green.	Dried																
Downs Division.	Bags.	Bush.	Dozen.	Dozen.	Cwt.	Bags	Bush.	Bush.	Tons.	Lb. Straw.	Lb.	Bush.	Dozen.	Lb.	Lb.	Lb.	Tons.	Lb.	Lb.	Lb.	Lb.	Lb.	Tons.
Allora	..	..	..	..	..	..	..	600	..	..	429,040	..	..	53,040	362,280	..	..	..	..	..	..	1,900	..
Chinchilla	..	..	..	..	960	..	..	..	..	..	1,846,778	..	..	120,660	1,813,960	450	..	665,180	..	..	22,400	28,620	..
Clifton	..	..	..	..	..	..	..	100	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Condamine	..	..	350	..	..	..	..	90	..	..	342,720	..	..	..	..	..	..	7,200	..	..	1,600	..	..
Dalby	100	..	200	..	..	..	..	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Goondiwindi	100	..	200	..	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Inglewood	..	..	500	..	60	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Killarney	300	..	43	200	80	330	..	443	..	..	176,696	..	..	414,720	..	..	12	210,960	..	..	..	..	..
Oakey	..	..	..	..	..	..	..	..	..	..	91,620	..	..	8,400	64,980	..	..	..	..	..	..	..	..
Pittsworth	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stanthorpe	58,353	..	38,002	..	..	26,853	..	119,879	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Texas	..	..	..	12	..	..	..	930	..	2,016	..	..	..	..	..	..	..	..	..	..	..	..	..
Toowoomba	465	405	22,479	370	53	358	308	255	2	..	336,800	..	..	4,800	287,840	..	..	99,840	24,530	..	..	..	..
Warwick	2,976	..	9,920	40	100	805	..	1,180	6	..	237,490	..	..	152,800	36,000	4,700	..	51,420	..	..	..	..	..
Total Downs	62,294	405	71,694	622	1,283	28,346	308	123,527	28	2,016	3,461,144	..	..	754,420	2,565,060	5,150	12	1,034,600	24,530	..	24,000	30,520	..
Grand Total, 1934	159,081	1,114	259,052	175,390	40,755	65,394	1,463	435,402	523	441,370	3,461,144	3,182	6,500	759,940	2,565,060	5,150	1,888	1,034,600	8,493,815	13,766	24,540	95,515	1
Grand Total, 1933	108,246	867	278,669	168,713	41,219	55,204	2,786	398,398	441	291,346	4,961,210	2,980	12,320	2,460,120	1,813,760	2,720	1,453	1,095,780	2,698,950	5,580	22,400	17,220	4
Increase, 1934	50,835	247	..	6,677	..	10,190	..	37,004	82	150,024	..	202	..	..	751,300	2,430	435	..	5,794,865	8,186	2,140	78,295	..
Decrease, 1934	..	..	19,617	..	464	..	1,323	..	..	..	1,500,066	..	5,820	1,700,180	..	..	..	61,180	..	..	..	..	3

Note.— Grass seed consists of Prairie Grass seed 152,800 lbs., Soudan 602,340 lbs., Sorghum 4,800 lbs. Millet seed consists of Japanese 781,720 lbs., French, 147,200 lbs., White 105,680 lbs.

Table No. XLV.

SHOWING THE TOTAL EXTENT OF LAND UNDER CULTIVATION AND THE AREA UNDER EACH DESCRIPTION OF CROP IN QUEENSLAND—RETURN FOR TEN YEARS.

YEAR.	Total Extent of Land under Cultivation.	Land in Fallow Lying Idle, &c.	Total Extent of Land under Crop.	AREA UNDER EACH DESCRIPTION OF CROP.															
				GRAIN CROPS.							POTATOES.		Pumpkins.	COTTON.		SUGAR-CANE.		Arrow-root.
				Wheat.	Oats.	Barley.		Maize.	Rye.	Rice.	English.	Sweet.		Bearing.	Total Area.	Area Crushed.	Total Area.	
						Malting.	Other.											
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1925	1,241,118	207,353	1,033,765	165,999	1,293	5,496	1,505	154,252	26	3	10,478	1,564	8,232	40,062	53,363	189,675	269,509	568
1926	1,288,518	346,735	941,783	57,084	210	250	149	137,542	3	9	8,642	1,252	5,963	18,743	31,460	189,312	266,519	831
1927	1,295,992	229,380	1,066,612	215,073	2,272	2,366	854	234,013	25	..	10,035	1,615	15,760	14,950	28,830	203,748	274,838	883
1928	1,268,475	223,843	1,044,632	218,069	916	5,188	2,466	192,173	70	3	8,154	1,841	8,746	20,316	26,122	215,674	283,476	538
1929	1,269,242	223,007	1,046,235	204,116	2,003	6,318	3,436	171,614	27	1	8,116	2,066	11,014	15,003	27,659	214,880	291,660	601
1930	1,331,513	187,297	1,144,216	272,316	5,132	6,148	2,286	172,176	29	..	10,277	2,015	14,437	22,652	35,527	222,044	296,070	761
1931	1,401,932	185,530	1,216,402	248,783	1,364	1,701	522	147,669	7	..	10,374	1,874	13,143	22,452	50,357	233,304	309,818	789
1932	1,426,648	181,010	1,245,638	250,049	3,733	3,275	1,515	98,487	18	..	9,743	1,791	9,546	29,995	56,108	205,046	291,136	691
1933	1,499,996	186,558	1,313,438	232,053	5,207	5,728	3,037	166,948	47	..	11,936	1,791	13,518	68,203	87,096	228,154	311,910	797
1934	1,512,591	215,972	1,296,619	221,729	4,566	6,600	3,004	160,607	75	..	11,666	2,271	12,272	43,397	77,747	218,426	303,926	835

YEAR.	AREA UNDER EACH DESCRIPTION OF CROP—*continued*.																		
	TOBACCO.		COFFEE.		Hay (all Kind).	Green Forage (all kinds.)	VINES.		BANANAS.		PINEAPPLES.		ORANGES.		MANGOES.		Straw-berries.	APPLES.		All Other Crops.
	Bearing.	Total Area.	Bearing.	Total Area.			Bearing.	Total Area.	Bearing.	Total Area.	Bearing.	Total Area.	Bearing.	Total Area.	Bearing.	Total Area.		Bearing.	Total Area.	
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1925	..	96	10	12	66,828	247,482	1,166	1,656	10,553	14,766	3,368	3,995	2,585	3,756	260	296	111	2,250	4,360	18,119
1926	..	125	17	19	40,141	342,580	1,268	1,682	11,122	16,489	3,274	4,235	2,734	3,899	211	240	86	2,759	4,203	18,170
1927	..	135	9	24	65,412	155,843	1,475	1,762	10,968	17,967	3,099	4,204	2,646	3,874	190	221	110	3,212	4,158	26,338
1928	..	138	7	11	55,498	180,524	1,627	1,787	13,185	19,750	3,259	4,734	2,752	3,734	208	249	152	3,502	4,133	26,160
1929	..	159	11	12	49,745	208,624	1,617	1,749	12,874	19,357	3,393	5,144	2,874	3,872	182	204	182	3,475	4,012	24,544
1930	..	71	12	12	52,228	217,282	1,519	1,687	12,565	18,030	3,983	5,543	2,805	3,773	155	185	173	3,427	4,039	24,019
1931	382	1,289	17	21	59,601	309,957	1,514	1,749	10,885	14,764	4,394	5,789	2,965	3,969	146	169	126	3,745	4,536	28,031
1932	3,817	7,239	7	9	64,076	392,762	1,586	1,868	7,235	10,589	4,534	5,862	2,824	3,622	132	160	114	3,527	4,741	28,504
1933	4,004	5,359	5	7	92,943	311,462	1,586	1,963	6,777	10,926	4,551	5,889	2,696	3,424	178	208	126	3,488	5,199	35,864
1934	2,081	2,585	18	23	86,477	338,312	1,517	1,926	7,027	10,323	4,603	5,584	2,836	3,421	176	211	138	3,451	5,373	37,948

Table No. XLVI.

SHOWING THE GROSS PRODUCE OF PRINCIPAL CROPS RAISED IN QUEENSLAND—RETUEN FOR TEN YEARS.

QUANTITY OF PRODUCE.

YEAR.	GRAIN CROPS.							POTATOES.		Pumpkins.	Cotton. Unginned.	SUGAR CANE.	
	Wheat.	Oats.	Barley.		Maize.	Rye.	Rice.	English.	Sweet.			Weight of Cane.	Sugar made at 94 % Net Titre.
			Malting.	Other.									
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	Tons.	Lb.	Tons.	Tons.
1925	1,973,477	14,546	74,575	17,866	3,384,172	615	35	15,386	6,742	23,030	19,537,274	3,668,252	485,585
1926	379,339	1,674	1,061	930	2,658,895	89	120	9,749	3,810	12,154	9,059,907	2,925,662	389,272
1927	3,783,584	43,788	57,032	15,368	6,703,518	638	..	18,914	6,009	51,148	7,060,756	3,555,827	485,745
1928	2,515,561	13,737	76,392	31,201	5,135,607	1,092	121	9,687	7,572	20,922	12,290,910	3,736,311	520,620
1929	4,235,172	38,494	139,604	65,963	4,376,412	364	12	13,214	7,017	27,591	8,024,502	3,581,265	518,516
1930	5,107,561	94,452	134,226	39,337	4,565,850	330	..	18,489	7,109	38,354	17,022,897	3,528,660	516,783
1931	3,863,894	20,352	28,882	7,515	3,780,597	54	..	17,189	6,802	33,222	15,244,644	4,034,300	581,276
1932	2,495,902	58,729	67,792	33,241	1,653,853	239	..	14,017	4,106	18,153	6,270,116	3,546,370	514,027
1933	4,361,614	69,534	99,786	52,694	3,715,764	840	..	20,123	5,344	33,440	17,718,306	4,667,122	638,559
1934	4,076,181	82,198	111,588	45,016	4,142,079	1,927	..	21,627	9,577	31,632	26,924,179	4,271,380	611,161

QUANTITY OF PRODUCE—*continued.*

YEAR.	Arrowroot (Tubers).	Tobacco (Cured Leaf).	Coffee.	Hay (all Kinds).	Ensilage.	VINES.		Bananas.	Pineapples.	Oranges.	Mangoes.	Strawberries.	Apples.
						Grapes.	Wine.						
	Tons.	Lb.	Lb.	Tons.	Tons.	Lb.	Gallons.	Bunches.	Dozens.	Bushels.	Bushels.	Quarts.	Bushels.
1925	7,842	103,523	5,192	99,742	4,654	2,898,546	39,375	2,582,784	902,636	281,862	39,636	129,612	130,369
1926	9,235	102,784	8,798	47,740	4,728	3,610,997	32,974	2,754,795	953,248	283,775	50,338	102,532	113,810
1927	10,122	109,595	6,578	94,996	9,721	3,777,830	38,571	2,863,414	823,331	243,037	34,295	85,924	103,893
1928	5,938	111,885	2,102	85,651	4,037	3,946,788	37,210	3,265,161	938,335	377,177	78,609	161,584	183,461
1929	4,870	192,943	8,227	79,583	2,933	4,230,703	48,174	2,940,683	857,116	272,801	45,623	330,287	177,062
1930	10,098	58,594	6,458	87,146	4,880	5,366,062	48,899	3,068,143	1,000,508	308,967	31,924	209,413	217,317
1931	8,276	260,670	8,455	91,275	5,819	4,917,808	41,456	2,950,678	1,181,654	304,661	36,781	148,329	179,745
1932	6,878	2,303,861	4,200	82,104	6,305	5,296,980	35,301	1,869,883	1,175,870	321,995	23,035	111,667	233,565
1933	9,950	2,079,754	5,580	144,250	8,515	5,053,022	31,796	2,027,505	1,355,300	294,396	11,126	158,732	298,372
1934	9,712	1,025,049	13,766	154,157	7,566	4,825,223	38,051	1,905,900	1,126,831	388,207	30,133	205,005	284,893

Table No. XLVII.

SHOWING THE GROSS VALUE OF PRINCIPAL CROPS RAISED IN QUEENSLAND—RETURN FOR TEN YEARS.

YEAR.	Wheat.	Oats.	BARLEY.		Maize.	Rye.	Rice.	POTATOES.		Pumpkins.	Cotton Unginned.	Sugar-cane.	Arrowroot (Tubers).
			Malting.	Other.				English.	Sweet.				
	£	£	£	£	£	£	£	£	£	£	£	£	£
1925	534,483	2,727	15,536	3,573	676,834	231	10	220,597	29,665	189,038	379,331	6,354,625	23,526
1926	126,841	488	252	221	883,529	45	32	169,246	39,529	183,070	190,069	6,153,474	27,705
1927	1,040,486	11,859	13,961	3,810	1,815,536	249	..	178,895	28,543	184,346	144,576	7,108,907	20,244
1928	639,372	3,663	18,780	7,865	802,439	428	41	80,322	26,187	125,532	213,832	7,209,778	11,876
1929	1,036,735	9,664	29,520	13,605	1,016,604	146	4	225,739	52,335	255,217	186,121	7,163,024	9,740
1930	1,030,642	22,039	24,608	6,843	965,487	132	..	165,245	25,918	138,234	354,652	7,040,415	21,206
1931	*a* 753,435	3,166	3,476	792	518,257	22	..	132,499	23,342	144,350	*k* 307,975	7,326,233	11,586
1932	*b* 447,169	10,400	10,169	4,986	389,345	74	..	108,630	21,043	89,252	*l* 125,106	6,852,717	12,037
1933	*c* 748,289	11,372	17,252	8,562	681,223	266	..	125,769	14,919	109,377	*m* 282,740	7,247,122	13,432
1934	*d* 776,689	14,214	19,501	6,253	562,095	434	..	180,225	28,730	119,224	*n* 397,263	6,934,764	10,683

YEAR.	Tobacco (Cured Leaf).	Coffee.	Hay (All Kinds).	Ensilage. *	Grapes.	Bananas.	Pineapples.	Oranges.	Mangoes.	Straw-berries.	Apples.	Tomatoes.	Cabbages and Cauli-flowers.	Total.
	£	£	£	£	£	£	£	£	£	£	£	£	£	£
1925	8,736	195	652,630	6,810	72,464	753,312	300,879	116,268	20,148	23,402	70,888	141,034	120,319	12,526,609
1926	8,019	330	422,689	7,721	97,798	660,003	314,770	162,579	24,750	10,766	63,425	193,349	124,309	12,181,917
1927	8,895	247	603,715	9,721	62,964	1,200,810	332,757	170,126	13,432	7,697	87,119	211,460	55,945	14,503,791
1928	7,594	79	453,204	8,416	93,768	960,000	225,413	155,681	24,292	14,700	64,020	234,650	96,079	12,709,041
1929	12,670	309	447,284	6,334	81,241	927,923	212,326	175,900	18,971	33,143	95,355	272,884	127,076	13,803,792
1930	5,640	242	430,571	9,939	85,776	903,113	212,528	122,943	10,602	14,615	77,601	208,743	85,352	12,821,665
1930	27,153	318	401,133	11,238	79,889	621,983	254,382	116,787	12,945	7,880	67,195	204,396	75,017	12,190,794
1932	230,386	158	413,961	12,668	93,319	427,208	196,914	122,808	7,432	7,038	94,337	165,272	80,406	11,305,731
1933	129,985	209	608,165	12,971	68,931	470,776	203,743	119,905	3,410	9,425	96,814	192,818	76,634	12,303,271
1934	69,400	516	614,010	11,067	68,715	335,685	207,870	97,900	10,193	4,615	89,940	194,140	47,333	11,905,806

a Includes Bounty, £72,188.
b Includes Bounty, £40,744.
c Includes Bounty, £76,455.
d Includes Bounty, £100,700.

k Includes Bounty, £90,753.
l Includes Bounty, £30,833.
m Includes Bounty, £73,540.
n Includes Bounty, £84,024.

* Not included in Total Value.

Table No. XLVIII.

SHOWING AVERAGE PRODUCE PER ACRE OF PRINCIPAL CROPS IN QUEENSLAND—RETURN FOR TEN YEARS.

Year.	GRAIN CROPS.							POTATOES.		SUGAR.														
	Wheat.	Oats.	Barley.		Maize.	Rye.	Rice.	English.	Sweet.	Pumpkins.	Cotton Unginned.	Cane per Acre Crushed.	Sugar per Acre Crushed.	Arrowroot (Tubers).	Tobacco (Cured Leaf).	Coffee.	Hay (all Kinds).	Grapes.	Bananas.	Pineapples.	Oranges.	Mangoes.	Strawberries.	Apples.
			Malting.	Other.																				
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	Tons.	Lb.	Tons.	Tons.	Tons.	Lb.	Lb.	Tons.	Lb.	Bunches.	Doz.	Bushels.	Bushels.	Quarts.	Bushels
1925 ...	11·89	11·25	13·57	11·87	21·94	23·65	11·67	1·47	4·31	2·80	488	19·36	2·56	13·81	1,078	519	1·49	2,486	245	268	109	152	1,168	52
1926 ...	6·85	7·97	4·24	6·24	19·33	29·67	13·33	1·13	3·04	2·04	483	15·45	2·06	11·11	822	518	1·19	2,848	248	291	104	239	1,192	41
1927 ...	17·59	19·27	24·10	18·00	28·65	25·52	...	1·88	3·72	3·25	472	17·45	2·38	11·46	812	731	1·45	2,561	261	266	92	181	781	32
1928 ...	11·54	15·00	14·72	12·65	26·72	15·60	40·33	1·19	4·11	2·39	605	17·32	2·41	11·04	811	300	1·54	2,426	248	288	137	378	1,063	52
1929 ...	20·75	19·22	22·10	19·20	25·50	13·48	12·00	1·63	3·40	2·51	535	16·67	2·41	8·10	1,213	748	1·60	2,616	228	253	95	251	1,815	51
1930 ...	18·76	18·40	21·83	17·21	26·52	11·38	...	1·80	3·53	2·66	751	15·89	2·33	13·29	825	538	1·67	3,533	244	251	110	206	1,210	63
1931 ...	15·53	14·92	16·98	14·40	25·60	7·71	...	1·66	3·63	2·53	679	17·29	2·49	10·49	682	497	1·53	3,248	271	269	103	252	1,177	48
1932 ..	9·97	15·73	20·70	21·94	16·79	13·28	...	1·44	2·29	1·90	209	17·30	2·51	9·95	604	600	1·28	3,340	258	259	114	175	980	66
1933 ...	18·80	13·35	17·42	17·35	22·26	17·87	...	1·69	2·98	2·47	260	20·46	2·80	12·48	519	1,116	1·55	3,186	299	298	109	63	1,260	86
1934 ...	18·38	18·00	16·91	14·99	25·79	25·69	...	1·85	4·22	2·58	620	19·56	2·80	11·63	493	765	1·78	3,181	271	245	137	171	1,486	83
*	14·64	16·59	18·11	17·36	23·23	7·47	19·09	1·70	3·78	2·74	436	17·37	2·34	11·44	586	509	1·41	2,605	208	245	106	213	1,202	53

* Average for twenty years.

Table No. XLIX.

RETURN SHOWING AVERAGE YIELD PER ACRE OF CROPS IN EACH DIVISION OF THE STATE FOR THE YEAR 1934.

DIVISION.	GRAIN CROPS.							POTATOES.		Sugar-cane (to Acres Crushed).	Cotton.	Arrow-root (Tuber).	Tobacco (Dried Leaf).	Coffee.	Pump-kins.	Hay of all Kinds.	Grapes.	Bananas.	Pine-apples.	Oranges.
	Wheat.	Oats.	Barley, Malting.	Barley, Other.	Maize.	Rye.	Rice.	English.	Sweet.											
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	Tons.	Lb.	Tons.	Lb.	Lb.	Tons.	Tons.	Lb.	Bunches.	Dozen.	Bushels.
Moreton	15·90	14·26	12·81	15·94	25·24	18·64	..	1·86	4·35	14·69	387	11·82	898	365	2·66	2·24	2,057	276	244	138
Wide Bay	10·37	16·83	..	7·64	29·37	25·63	..	1·86	4·37	21·02	728	6·52	137	1,085	2·70	2·19	1,120	279	286	172
Port Curtis	9·08	25·00	..	13·75	20·70	..	..	1·92	2·83	15·84	620	..	265	..	2·03	2·17	2,546	357	274	127
Edgecumbe	20·00	..	..	..	22·40	..	..	2·09	2·00	19·68	635	..	900	..	1·25	6·00	2,269	244	185	78
Rockingham	..	..	..	..	13·33	..	..	1·46	2·58	19·04	210	..	427	..	4·00	2·06	1,747	113	88	130
York Peninsula	..	..	..	..	24·38	..	..	..	2·73		..	..	217	..	0·58	..	..	15	13	17
Carpentaria	..	..	..	..	33·08	..	..	1·00	1·33	..	..	..	..	..	1·33	..	..	..	..	62
Central-western	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South-western	..	..	..	..	..	..	..	2·50	1·00	..	..	..	..	..	2·00	..	3,670	..	..	84
Central	..	..	..	..	18·30	20·00	..	..	..	..	236	..	..	..	1·00	0·60	291	..	..	152
Maranoa	9·92	2·91	..	7·20	10·64	..	..	2·14	1·50	..	270	..	..	..	0·90	0·92	2,073	..	..	94
Downs	19·25	18·43	16·93	15·15	28·40	29·03	..	1·71	1·75	..	183	..	492	..	2·47	1·01	4,359	..	..	73
TOTAL AVERAGE YIELD, 1934	18·38	18·00	16·91	14·99	25·79	25·69	..	1·85	4·22	19·56	620	11·63	493	765	2·58	1·78	3,181	271	245	137
TOTAL AVERAGE YIELD, 1933	18·80	13·35	17·42	17·35	22·26	17·87	..	1·69	2·98	20·46	260	12·48	519	1,116	2·47	1·55	3,186	299	298	109
INCREASE, 1934	..	4·65	..	..	3·53	7·82	..	0·16	1·24	..	360	..	..	..	0.11	0·23	..	..	..	28
DECREASE, 1934	0·42	..	0·51	2·36	..	..	..	..	..	0·90	..	0·85	26	351	..	..	5	28	53	..

Table No. L.

RETURN SHOWING THE AREA, YIELD, AND VALUE OF CROPS FOR THE YEAR 1934.

Description of Crop.	Area not Bearing.	Area Bearing.	Yield.	Value.
	Acres.	Acres.		£
Cereals — Barley (Malting)	..	6,600	111,588 bushels	19,501
Cereals — Barley, Other	..	3,004	45,016 ,,	6,253
Cereals — Maize	..	160,607	4,142,079 ,,	562,095
Cereals — Oats	..	4,566	82,198 ,,	14,214
Cereals — Wheat	..	221,729	4,076,181 ,,	*776,689
Cereals — Other Cereals, Rice	..	..	..	..
Cereals — Other Cereals, Rye	..	75	1,927 ,,	434
Grass Seed	..	778	12,666 ,,	3,670
Green Forage (All Kinds)	..	338,312	..	676,624
Hay — Lucerne	..	75,538	139,870 tons	559,480
Hay — Oaten	..	3,426	4,373 ,,	24,050
Hay — Wheaten	..	3,472	4,022 ,,	12,100
Hay — Other	..	4,041	5,892 ,,	18,380
Straw — Oaten	..	..	119 ,,	535
Straw — Wheaten	..	..	273 ,,	1,230
Straw — Other	..	..	47 ,,	210
Pulse — Beans	..	16	1,114 bushels	1,337
Pulse — Peas	..	42	1,463 ,,	768
Root Crops — Arrowroot (Tubers)	..	835	9,712 tons	10,683
Root Crops — Ginger	..	1	1 ,,	42
Root Crops — Mangolds	..	290	1,888 ,,	3,776
Root Crops — Onions	..	557	40,755 cwt.	18,850
Root Crops — Potatoes, English	..	11,666	21,627 tons	180,225
Root Crops — Potatoes, Sweet	..	2,271	9,577 ,,	28,730
Root Crops — Turnips (including Swede Turnips)	..	106	523 ,,	3,138
Grapes — For Table Use	409	1,517	4,255,102 lb.	65,665
Grapes — For Wine			570,121 ,,	3,050
Grapes — For Drying Purposes				
Sugar-cane	85,500	218,426	4,271,380 tons	6,934,764
Tobacco	504	2,081	1,025,049 lb. dried leaf	69,400
Market Gardens	..	801	..	29,185
Orchards and Fruit Gardens — Almonds	..	..	..	..
Orchards and Fruit Gardens — Apples	1,922	3,451	284,893 bushels	89,940
Orchards and Fruit Gardens — Apricots	53	109	6,992 ,,	3,496
Orchards and Fruit Gardens — Bananas	3,296	7,027	1,905,900 bunches	335,685
Orchards and Fruit Gardens — Cape Gooseberries	..	21	51,760 quarts	760
Orchards and Fruit Gardens — Cherries	..	6	419 bushels	500
Orchards and Fruit Gardens — Custard Apples	13	200	28,869 ,,	8,640
Orchards and Fruit Gardens — Figs	..	17	4,131 ,,	1,652
Orchards and Fruit Gardens — Lemons	34	105	14,621 ,,	5,239
Orchards and Fruit Gardens — Mangoes	35	176	30,133 ,,	10,193
Orchards and Fruit Gardens — Nectarines	..	34	1950, ,,	490
Orchards and Fruit Gardens — Olives	..	..	..	..
Orchards and Fruit Gardens — Oranges and Mandarines	585	2,836	388,207 ,,	97,900
Orchards and Fruit Gardens — Passion Fruit	..	120	10,921 ,,	7,502
Orchards and Fruit Gardens — Pawpaws	261	585	133,242 dozen	9,142
Orchards and Fruit Gardens — Peaches	397	1,397	99,542 bushels	38,161
Orchards and Fruit Gardens — Pears	41	204	19,396 ,,	5,170
Orchards and Fruit Gardens — Persimmons	2	4	1,612 ,,	480
Orchards and Fruit Gardens — Pineapples	981	4,603	1,126,831 dozen	207,870
Orchards and Fruit Gardens — Plums	294	1,001	73,948 bushels	38,200
Orchards and Fruit Gardens — Quinces	..	1	137 ,,	45
Orchards and Fruit Gardens — Strawberries	..	138	205,005 quarts	4,615
Orchards and Fruit Gardens — Watermelons	..	189	732 tons	4,450
Orchards and Fruit Gardens — Other (Gardens and Orchards)	..	377	..	9,250
Other Crops — Broom Millet	..	399	441,370 lb. straw	5,110
Other Crops — Cabbages and Cauliflowers	..	1,234	259,052 dozen	47,333
Other Crops — Canary Seed	..	8,337	3,461,144 lb.	41,383
Other Crops — Cocoanuts	..	320	6,500 dozen	1,100
Other Crops — Coffee	5	18	13,766 lb.	516
Other Crops — Cotton Unginned	34,350	43,397	26,924,179 lb.	†397,263
Other Crops — Cowpea	..	456	3,182 bushels	1,195
Other Crops — Cucumbers	..	306	175,390 dozen	17,260
Other Crops — Green Beans	..	1,808	159,081 bags	66,610
Other Crops — Green Peas	..	978	65,394 ,,	16,353
Other Crops — Linseed	..	11	24,540 lb. seed	360
Other Crops — Lucerne Seed	..	61	5,150 ,,	343
Other Crops — Millet Seed	..	409	1,034,600 ,,	3,285
Other Crops — Panicum Seed	..	2,575	2,565,060 ,,	9,733
Other Crops — Peanuts	..	7,501	8,493,815 lbs.	79,500
Other Crops — Pumpkins	..	12,272	31,632 tons	119,224
Other Crops — Sunflower Seed	..	57	95,515 lb.	640
Other Crops — Tomatoes	..	4,440	435,402 bushels	194,140
	128,682	1,167,937		11,905,806
Total under Crop		1,296,619		
Land in fallow		72,089		
Area under permanent artificially sown grasses		869,777		
Previously cropped land lying idle during season		143,883		
New ground cleared but not ploughed during season.		4,643		
Total area of arable land		2,387,011		

*Includes Bounty and Relief, £100,700.

† Includes Bounty, £84,024.

Table No. LI.

DATES OF PLANTING AND HARVESTING.

Principal Crops in Queensland.

Note.—Owing to the great size of Queensland with its irregular rainfall and great climate differences, this information is of necessity rather indefinite. Times of planting and consequently times of harvesting vary according to the local conditions.

The following are the dates of planting and harvesting as nearly as can be obtained :—

Crop.	Time of Planting.	Time of Harvesting.
Arrowroot	August to October	June, July, August
Barley (1) Skinless, (2) Cape, (3) Malting	For green fodder ; from third week in February at intervals until about second week in July. For grain ; usually sown in May	From mid October until end of November

Note.—Skinless and Cape Barley are mostly for feeding off, and malting barley for grain, although of course Skinless and Cape are also grown for grain.

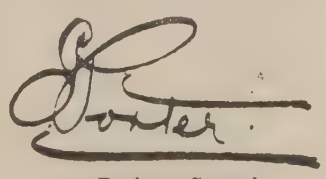
Canary Seed	Early planting for dual purposes, both fodder and seed made about the second to third week in April. Main planting in May, but may extend under favourable conditions till August	From mid October to end of November
Cotton	From first September to mid December, Central and South ; and till end of February, North	Beginning of March to end of October
Hay (1) Wheaten	From beginning of April to about middle of June, according to district	October and early November

Note.—A fair amount of hay is grown below the range between Toowoomba and Brisbane and harvested usually in October, as early maturing varieties are used.

Hay (2) Oaten	March to end of May	Mid October to November
Maize	August to second week in January, according to district. Earlier districts, August, are usually fairly free from frost and "catch" crops are commonly planted. Main planting season in November in Southern and Central Queensland. In North Queensland (mainly Atherton Tableland) the season synchronises with the commencement of the wet season, usually starting about 1st January	May extend from latter end of December until latter end of August. Main harvest May, June, July
Sorghum, Millet, &c., (including Broom Millet and Millet grown for Fodder)	August to end of January, according to district	Sorghums about five months from planting. Millets earlier—ten weeks

Note.—The practice of late sowing is followed in some districts to synchronise with the wet season. Broom Millet commonly planted from September to November (inclusive), is harvested within five months of time of planting Seed.

Sugar	April and October	Crushing from May to February. Cane-cutters start a day or two ahead of the crushers and thus keep them supplied
Wheat	Main season May and June. Range of planting April to first week in August. Customary in some districts to plant slow-maturing varieties in April, either feeding it off to dairy cattle and sheep or ultimately allowing it to mature into grain	Maranoa is earliest district. Harvesting in this district starts in some seasons in second week of October and continues to first week of November. In Darling Downs and other districts harvesting usually starts about the first week of November and is carried on until the end of that month.
Tobacco	Mid October to early December, but late planting not advocated	April
Potatoes	February and August	Three to four months after planting
Fruit.		
Bananas	October, November, December, January, and February	All year
Citrus Fruits	May to August, February	April to October
Custard Apples	June to August	May to August
Deciduous Fruits	May to August	End of November to end of March
Grapes	August and September	December to end of April
Mangoes	February, June, and July	September to March
Pawpaws	September and October, February and March	Autumn and Winter
Passion Fruit	September and October, February and March	All year. Main crops Summer and Autumn. Light Spring crop.
Pineapples	September to February	Christmas to end of March and July and August are two main crops. Off crops any time of year
Strawberries	March and April	May and October



Registrar-General,

REPORT OF THE REGISTRAR-GENERAL ON LIVE STOCK AND PASTORAL PRODUCTION FOR THE YEAR 1934.

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RETURN SHOWING THE NUMBER OF LIVE STOCK IN THE STATE FOR TWO YEARS, AND THE INCREASE OR DECREASE FOR THE YEAR 1934.

Year ended 31st December.	Horses.	Cattle.	Sheep.	Swine.
1933	450,024	5,781,170	20,072,804	217,448
1934	448,604	6,052,641	21,574,182	269,873
Numerical Increase in 1934	...	271,471	1,501,378	52,425
Numerical Decrease in 1934	1,420	...	...	...
Centesimal Increase in 1934	...	4·70	7·48	24·11
Centesimal Decrease in 1934	0·32	...	...	...

Table No. II.

RETURN FOR TEN YEARS SHOWING THE NUMBER OF HORSES, CATTLE, SHEEP, AND SWINE IN THE STATE.

Year ended 31st December.	Horses.	Cattle.	Sheep.	Swine.
1925	638,372	6,436,645	20,663,323	199,598
1926	571,622	5,464,845	16,860,772	183,662
1927	548,333	5,225,804	16,642,385	191,947
1928	522,490	5,128,341	18,509,201	215,764
1929	500,104	5,268,588	20,324,303	236,037
1930	481,615	5,463,724	22,542,043	217,528
1931	469,474	5,550,399	22,324,278	222,686
1932	452,486	5,535,065	21,312,865	213,249
1933	450,024	5,781,170	20,072,804	217,448
1934	448,604	6,052,641	21,574,182	269,873

Table No. III.

RETURN FOR TEN YEARS SHOWING THE CENTESIMAL INCREASE OR DECREASE IN LIVE STOCK.

Year ended 31st December.	Horses.	Cattle.	Sheep.	Swine.
1925	— 3·29	— 0·28	8·59	27·81
1926	— 10·46	— 15·10	— 18·40	— 7·98
1927	— 4·07	— 4·37	— 1·30	4·51
1928	— 4·71	— 1·87	11·22	12·41
1929	— 4·28	1·56	9·81	9·40
1930	— 3·70	4·90	10·91	— 7·84
1931	— 2·52	1·59	— 0·97	2·37
1932	— 3·62	— 0·28	— 4·53	— 4·24
1933	— 0·54	4·45	— 5·82	0·20
1934	— 0·32	4·70	7·48	24·11

— Decrease.

Table No. IV.

RETURN SHOWING THE DENSITY AND THE PROPORTION OF THE VARIOUS KINDS OF LIVE STOCK IN THE SEVERAL PASTORAL DISTRICTS AND THE NUMBER PER CAPITA IN THE STATE AS AT 31ST DECEMBER, 1934.

In Converting Horses and Cattle to Terms of Sheep, Ten Head of Sheep are Taken as Equal to One Horse or Head of Cattle.

Pastoral District.	Area in Acres.	Centesimal Ratio of Area of District to Area of State.	Horses.			Cattle.			Sheep.			All Kinds in terms of Sheep.		
			Acres per Head.	Number per Square Mile.	Percentage to Total in State.	Acres per Head.	Number per Square Mile.	Percentage to Total in State.	Acres per Head.	Number per Square Mile.	Percentage to Total in State.	Acres per Head.	Number per Square Mile.	Percentage to Total in State.
Burke	65,383,040	15·24	2,140	0·30	6·81	115	5·56	9·38	25	25·41	12·03	7·62	84·00	9·91
Burnett	7,972,480	1·86	220	2·91	8·09	14	46·67	9·61	1,813	0·35	0·02	1·29	496·23	7·14
Cook	63,601,920	14·82	1,956	0·33	7·25	128	5·00	8·21	210,602	0·00	0·00	12·01	53·30	6·12
Darling Downs ...	16,249,600	3·79	262	2·44	13·82	27	23·96	10·05	6	103·19	12·14	1·74	367·20	10·77
Gregory North ...	54,266,240	12·64	5,247	0·12	2·31	296	2·16	3·03	32	19·73	7·75	15·03	42·59	4·17
Gregory South ..	31,617,920	7·37	5,209	0·12	1·35	281	2·28	1·86	65	9·81	2·25	18·92	33·83	1·93
Leichhardt ...	30,946,560	7·21	803	0·80	8·60	42	15·37	12·28	29	22·28	4·99	3·48	183·91	10·27
Maranoa	25,110,405	5·85	1,213	0 53	4·62	134	4·78	3·10	7	97 34	17·70	4·26	150·38	6·81
Mitchell	35,431,680	8·26	1,601	0·40	4·94	465	1·38	1·26	6	101·35	26·01	5·37	119·13	7·62
Moreton	5,649,920	1·32	103	6·23	12·26	9	68·63	10·01	722	0·89	0·04	0 85	749·50	7·64
North Kennedy ..	21,832,960	5·09	483	1·33	10·08	43	14·72	8·29	3,909	0·16	0·03	3 99	160·58	6·33
Port Curtis ...	8,994,560	2·09	336	1·90	5·96	17	36·82	8·55	354	1·81	0·12	1·65	389·03	6·31
South Kennedy...	19,528,960	4·55	844	0·76	5·15	52	12·41	6·26	76	8·43	1·19	4·57	140·10	4 94
Warrego	37,333,760	8·70	2,800	0·23	2·97	303	2·12	2·04	11	58 09	15·71	7·85	81·33	5·49
Wide Bay ...	5,200,000	1·21	200	3·20	5·79	14	45·25	6·07	1,284	0·50	0·02	1·32	484·97	4·55
STATE ...	429,120,000	100·00	957	0·67	100·00	71	9·03	100·00	20	32·18	100·00	4·96	129·14	100·00
Number per Capita Population ...			0·47			6·31			22·48			90·24		

Table No. V.

The following table shows, from the latest information available, the live stock density in various countries :—

	Live Stock in Terms of Sheep per Square Mile.
Queensland	129
New South Wales	304
Victoria	469
Argentina	403
Australia	91
Germany	1,260
Soviet Republics	75
Union of South Africa	361
United Kingdom	1,815
United States of America	272

Table No. VI.

RETURN SHOWING NUMBER AND PROPORTION OF HORSES, CATTLE, SHEEP, AND SWINE IN THE SOUTHERN, CENTRAL, AND NORTHERN DIVISIONS OF THE STATE AS AT 31ST DECEMBER, 1934.

Division.	Horses.		Cattle.		Sheep.		Swine.	
	No.	%	No.	%	No.	%	No.	%
Southern	225,244	50·21	2,749,310	45·42	10,407,190	48·24	244,848	90·73
Central	98,953	22·06	1,521,144	25·13	8,465,324	39·24	9,453	3·50
Northern	124,407	27·73	1,782,187	29·45	2,701,668	12·52	15,572	5·77
Totals	448,604	100·00	6,052,641	100·00	21,574,182	100·00	269,873	100·00

Table No. VII.

RETURN SHOWING NUMBER OF HORSES, CATTLE, AND SHEEP PER SQUARE MILE AND PER CAPITA OF POPULATION IN THE SOUTHERN, CENTRAL, AND NORTHERN DIVISIONS OF THE STATE AS AT 31ST DECEMBER, 1934.

Division.	Area in sq. miles.	Population. *	Horses.		Cattle.		Sheep.		All Kinds in term of Sheep.	
			Per Sq. Mile.	Per Capita of Population.	Per Sq. Mile.	Per Capita of Population.	Per Sq. Mile.	Per Capita of Population.	Per Sq. Mile.	Per Capita of Population.
Southern	209,980	678,250	1·07	0·33	13·09	4·05	49·56	15·34	191·22	59·20
Central	209,340	96,418	0·47	1·03	7·27	15·78	40·44	87·80	117·83	255·83
Northern	251,180	184,829	0·50	0·67	7·10	9·64	10·76	14·62	86·66	117·77

* Estimated 31st December, 1934 (Total. 959,497).

Table No. VIII.

RETURN SHOWING THE NUMBER OF HORSES IMPORTED AND EXPORTED INTO AND FROM THE STATE FOR THE YEAR 1934.

HORSES IMPORTED DURING 1934.					HORSES EXPORTED DURING 1934.				
Country.	Number.		Value.		Country.	Number.		Value.	
Oversea—					*Oversea*—				
					British Malaya ..	3		120	
					China	43		1,720	
					India	2,128		32,645	
					Netherlands (East Indies)	67		1,005	
					Papua	71		852	
					Territory of New Guinea	16		462	
							2,329		36,812
Interstate (by land)—					*Interstate (by land)*—				
New South Wales	7,997		65,701		New South Wales ..	18,465		108,343	
Northern Territory	973		4,197		Northern Territory	953		4,636	
South Australia ..	162		521		South Australia ..	734		2,632	
		9,132		70,419			20,152		115,611
Totals ..	..	9,132	..	70,419	Totals ..	..	22,481	..	152,423

Table No. IX.

RETURN FOR TEN YEARS SHOWING THE NUMBER OF ENTIRE AND OTHER HORSES.

Year ended 31st Dec.	Entire Horses.	Other Horses.	Total.
1925	2,827	635,545	638,372
1926	2,221	569,401	571,622
1927	1,951	546,382	548,333
1928	1,750	520,740	522,490
1929	1,700	498,404	500,104
1930	1,805	479,810	481,615
1931	2,221	467,253	469,474
1932	2,147	450,339	452,486
1933	2,389	447,635	450,024
1934	2,358	446,246	448,604

Table No. X.

RETURN FOR TEN YEARS SHOWING THE NUMBER OF OWNERS AND THE SIZES OF HERDS UNDER VARIOUS GROUPINGS, ALSO THE CENTESIMAL INCREASE OR DECREASE FOR THE YEAR 1934.

For Details of Sizes of Herds of Cattle in Pastoral Districts, for the Year 1934, see Table No. XXXVII.

Year ended 31st Dec.	1 to 100.		101 to 200.		201 to 300.		301 to 500.		501 to 1,000.	
	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.
1925 ..	39,341	1,096,618	4,151	694,989	*	*	916	355,795	715	506,630
1926 ..	38,922	1,048,964	3,781	635,735	*	*	819	321,806	657	467,437
1927 ..	38,234	1,058,777	3,841	640,761	*	*	791	307,384	639	460,477
1928 ..	37,501	1,086,823	4,017	662,848	*	*	787	309,195	637	451,767
1929 ..	37,376	1,113,944	4,359	713,674	*	*	841	326,676	633	447,727
1930 ..	37,590	1,153,767	4,709	768,192	*	*	867	338,439	652	458,244
1931 ..	38,715	1,219,244	5,006	822,241	*	*	889	346,963	679	477,297
1932 ..	39,805	1,254,112	4,978	812,966	*	*	856	330,355	708	495,940
1933 ..	40,064	1,297,024	3,969	554,522	1,126	280,329	878	343,673	718	510,694
1934 ..	40,204	1,332,945	4,195	587,156	1,195	296,263	921	358,358	771	544,854

Year ended 31st Dec.	1,001 to 5,000.		5,001 to 10,000.		10,001 and Upwards.		Totals.		Average Size of Herds.
	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.	
1925	751	1,563,877	136	921,985	73	1,296,751	46,083	6,436,645	140
1926	617	1,303,068	113	776,324	49	911,511	44,958	5,464,845	122
1927	609	1,278,875	106	731,917	40	747,613	44,260	5,225,804	118
1928	589	1,238,377	93	643,522	43	735,809	43,667	5,128,341	117
1929	601	1,256,436	106	729,907	37	620,224	43,953	5,208,588	119
1930	640	1,330,754	98	658,532	46	755,796	44,602	5,463,724	122
1931	617	1,286,905	105	704,694	40	693,055	46,051	5,550,399	121
1932	611	1,286,119	101	708,518	37	647,055	47,096	5,535,065	118
1933	645	1,321,670	108	766,659	41	706,599	47,549	5,781,170	122
1934	666	1,375,325	111	795,913	47	761,827	48,110	6,052,641	126
Increase							1.18	4·70	3·28

* Included in Group 101 to 200.

Table No. XI.

RETURN FOR TEN YEARS SHOWING THE NUMBER OF OWNERS AND THE SIZES OF FLOCKS UNDER VARIOUS GROUPINGS, ALSO THE CENTESIMAL INCREASE OR DECREASE FOR THE YEAR 1934.

For Details of Sizes of Flocks of Sheep in Pastoral Districts for the Year 1934 see Table No. XXXIX.

Year ended 31st Dec.	1 to 500.		501 to 1,000.		1,001 to 2,000.		2,001 to 5,000.		5,001 to 10,000.	
	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.
1925 ..	1,760	225,800	382	290,070	521	788,722	805	2,701,654	525	3,686,331
1926 ..	1,917	254,351	474	357,721	604	908,897	1,027	3,389,550	457	3,207,379
1927 ..	2,024	273,668	554	410,614	709	1,071,703	1,020	3,371,043	471	3,220,135
1928 ..	1,948	270,670	548	411,937	758	1,129,591	1,095	3,637,181	553	3,830,572
1929 ..	1,913	252,107	548	415,464	766	1,148,611	1,234	4,088,974	662	4,560,694
1930 ..	1,944	245,755	520	398,080	673	1,006,284	1,214	4,078,142	734	5,053,772
1931 ..	1,911	227,967	526	401,406	677	1,002,776	1,231	4,179,403	772	5,348,174
1932 ..	1,788	214,150	551	415,076	679	1,026,160	1,250	4,262,626	767	5,341,945
1933 ..	1,705	212,286	527	392,199	710	1,087,876	1,243	4,217,809	787	5,442,649
1934 ..	1,587	195,446	518	391,620	698	1,055,507	1,371	4,714,367	770	5,343,165

Year ended 31st Dec.	10,001 to 20,000.		20,001 to 50,000.		50,001 to 100,000.		100,001 and Upwards.		Totals.		Average Size of Flocks.
	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	
1925 ..	286	3,931,942	151	4,707,128	48	3,304,523	9	1,027,153	4,487	20,663,323	4,605
1926 ..	235	3,240,198	120	3,726,023	23	1,423,600	3	353,053	4,860	16,860,772	3,469
1927 ..	234	3,280,459	109	3,364,725	22	1,362,817	2	287,221	5,145	16,642,385	3,235
1928 ..	279	3,899,803	113	3,399,575	24	1,570,488	3	359,384	5,321	18,509,201	3,479
1929 ..	286	4,021,226	127	3,791,241	25	1,570,079	4	475,907	5,565	20,324,303	3,652
1930 ..	313	4,356,680	158	4,635,047	33	2,261,447	4	506,836	5,593	22,542,043	4,030
1931 ..	303	4,144,829	153	4,445,418	35	2,302,423	2	271,882	5,610	22,324,278	3,979
1932 ..	302	4,132,447	109	3,329,982	35	2,323,938	2	266,541	5,483	21,312,865	3,887
1933 ..	273	3,766,895	113	3,338,748	23	1,490,490	1	123,852	5,382	20,072,804	3,730
1934 ..	302	4,128,259	126	3,742,267	29	1,882,996	1	120,555	5,402	21,574,182	3,994
Increase									0·37	7·48	7·08

Table No. XII.

RETURN FOR TEN YEARS SHOWING THE RESULTS OF LAMBING, LOSSES, ETC., IN THE STATE.

For Details for the Year 1934 see Tables No. LII. and LIII.

—	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.
Total Sheep as per Stock Returns on 1st January	19,023,252	20,663,323	16,860,772	16,642,385	18,509,201	20,324,303	22,542,043	22,324,278	21,312,865	20,072,804
Ewes mated with Rams	8,772,276	6,557,034	6,980,529	7,820,137	8,114,502	9,153,966	9,107,493	8,877,345	7,526,979	9,454,686
Lambs Marked	4,638,376	2,245,998	2,481,955	3,995,065	4,257,250	5,625,924	5,013,286	4,243,356	3,336,321	4,979,373
Percentage of Lambing	52·88	34·25	35·56	51·09	52·46	61·43	55·05	47·80	44·32	52·67
Purchases	4,173,815	3,889,789	4,371,786	5,095,420	4,332,101	3,334,721	3,109,122	3,076,159	4,447,856	3,602,919
Sales	4,793,725	4,409,589	4,429,268	5,331,870	4,693,815	4,642,376	5,621,848	5,141,507	5,821,505	4,777,149
Losses	2,197,262	5,335,207	2,449,231	1,693,954	1,851,105	1,840,943	2,449,784	2,920,545	2,935,089	2,042,567
Killed for Food on Holding	186,133	193,542	193,629	197,845	229,329	259,586	268,541	268,876	267,644	261,198
Total Sheep as per Stock Returns on 31st December	20,663,323	16,860,772	16,642,385	18,509,201	20,324,303	22,542,043	22,324,278	21,312,865	20,072,804	21,574,182
Skins obtained †	180,852	201,169	232,920	205,797	208,162	219,347	206,204	139,674	159,351	182,856

† Year ended 30th June.

Table No. XIII.

RETURN FOR TWO YEARS SHOWING THE NUMBER OF CATTLE, ETC., EXPORTED AND NUMBER KILLED FOR EXPORT OR FOR HOME CONSUMPTION.

YEAR ENDED 31ST DECEMBER.	CATTLE AND CALVES.		SHEEP AND LAMBS.		SWINE.	
	1933.	1934.	1933.	1934.	1933.	1934.
Exported, less number imported alive Oversea	28	37	147	44	1	...
Exported, less number imported alive Overland	142,626	213,471	17,354	242,634	554	— 1,276
Number killed for export (meatworks, bacon factories, and abattoir)	287,218	393,886	204,915	247,773	46,643	74,187
Number killed for home consumption (meatworks, bacon factories, abattoir, slaughterhouses, stations, and farms)	*385,465	†403,936	*1,227,677	†1,025,901	*346,089	†374,282
Totals	*815,337	†1,011,330	*1,450,093	†1,516,352	*393,287	†447,193

* Includes 6,710 cattle and calves, 2,121 sheep and lambs, and 3,732 swine killed, but subsequently condemned.
† Includes 4,757 cattle and calves, 6,682 swine killed and used for small goods, 7,695 cattle and calves, 2,399 sheep and lambs, and 4,578 swine killed, but subsequently condemned.

Table No. XIV.

RETURN FOR TEN YEARS SHOWING THE NUMBER OF HORSES, CATTLE, SHEEP, AND SWINE IMPORTED INTO AND EXPORTED FROM THE STATE OVERLAND AND OVERSEA.

*Year.	Horses.		Cattle.		Sheep.		Swine.	
	Inward.	Outward.	Inward.	Outward.	Inward.	Outward.	Inward.	Outward.
	Number.	Number.	Number.	Number.	Number.	Number.	Number.	Number
1925 Overland, Calendar year..	25,375	18,032	23,353	243,322	283,795	606,237	†	†
1925 Overland, Financial year..	13,838	15,244	29,431	194,608	242,674	461,161	†	†
1925 Oversea, Calendar year ..	1	3,407	4	53	..	13	†	†
1925 Oversea, Financial year ..	2	2,901	4	63	..	16	..	6
1926 Overland, Calendar year..	11,299	15,151	14,530	335,600	448,586	684,498	†	†
1926 Overland, Financial year..	22,757	20,619	18,592	335,724	225,579	791,533	†	†
1926 Oversea, Calendar year ..	..	2,428	..	72	..	6	..	3
1926 Oversea, Financial year ..	..	3,609	..	49	..	..	..	5
1927 Overland, Calendar year..	11,461	9,935	108,192	168,730	1,150,437	457,897	†	†
1927 Overland, Financial year..	14,696	20,876	71,722	265,384	937,030	630,207	†	†
1927 Oversea, Calendar year ..	..	634	..	54	..	22	..	50
1927 Oversea, Financial year ..	..	2,839	..	80	..	17	..	11
1928 Overland, Jan. to June ..	3,804	6,364	4,129	264,225	422,589	351,990	†	†
1928 Overland, July to Dec. ..	3,277	5,203	5,145	101,877	328,665	317,304	126	3,174
1928 Oversea, Jan. to June ..	5	2,137	..	18	..	54	..	24
1928 Oversea, July to Dec. ..								42
1929 Overland, Jan. to June ..	23,561	6,232	51,614	85,028	394,970	220,978	143	4,287
1929 Overland, July to Dec. ..	4,904	7,682	34,049	95,550	233,915	314,820	134	12,244
1929 Oversea, Jan. to June ..	..	2,906	..	21	..	316	..	7
1929 Oversea, July to Dec. ..								20
1930 Overland, Jan. to June ..	5,271	8,579	66,092	84,111	397,616	346,064	201	7,373
1930 Overland, July to Dec. ..	9,470	10,460	34,709	142,702	215,204	543,794	595	3,751
1930 Oversea, Jan. to June ..	..	2,492	13	25	..	344	..	3
1930 Oversea, July to Dec. ..								5
1931 Overland, Jan. to June ..	4,974	8,212	28,147	122,681	156,266	382,188	627	3,497
1931 Overland, July to Dec. ..	6,783	11,819	24,226	134,406	121,501	812,607	694	1,488
1931 Oversea, Jan. to June ..	1	147	10	..	..	170	..	..
1931 Oversea, July to Dec. ..	..	1,822	..	13	..	310	..	8
1932 Overland, Jan. to June ..	5,368	11,017	13,595	128,879	118,561	537,096	779	2,792
1932 Overland, July to Dec. ..	5,925	11,666	17,430	111,451	171,706	566,031	903	591
1932 Oversea, Jan. to June ..	..	2	..	4	..	260	..	..
1932 Oversea, July to Dec. ..	1	942	..	13	..	..	..	..
1933 Overland, Jan. to June ..	6,160	7,828	21,442	61,104	264,519	172,063	792	1,431
1933 Overland, July to Dec. ..	5,789	8,925	24,700	127,664	209,042	318,852	476	391
1933 Oversea, Jan. to June ..	1	8	2	1	..	41	1	3
1933 Oversea, July to Dec. ..	..	1,820	..	29	..	106	2	1
1934 Overland, Jan. to June ..	5,024	10,237	48,082	160,492	177,227	273,279	1,314	792
1934 Oversea, Jan. to June ..	..	6	2	13	..	98	..	3
1934 Overland, July to Dec. ..	4,108	9,915	17,465	118,526	165,664	312,246	1,135	381
1934 Oversea, July to Dec. ..	..	2,323	..	37	..	44	..	..
1935 Overland, Jan. to June ..	3,289	8,399	22,101	56,259	161,757	350,842	803	485
1935 Oversea, Jan. to June ..	..	110	12	18	..	24	3	2

† Not available.

* Interstate coastwise traffic for the six months ended 30th June, 1932, was as follows:—Inward—Horses 47, Value £3,913; Cattle 17, Value £827; Sheep 6, Value £240; Swine 2, Value £50. Outward—Nil.

Table No. XV.

RETURN OF LIVE STOCK AND WOOL CROSSING THE QUEENSLAND BORDERS DURING THE YEAR ENDED 31ST DECEMBER, 1934.

—	Horses.		Cattle.		Sheep.		Swine.		Wool.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Bales.	*Value.
		£		£		£		£	No.	£
INWARD.										
From—										
New South Wales ..	7,997	65,701	15,651	37,776	342,891	261,253	2,449	3,902	5,107	72,211
Northern Territory ..	973	4,197	49,045	181,811	..	..	..	..	..	..
South Australia ..	162	521	851	2,755	..	..	..	..	..	..
Totals	9,132	70,419	65,547	222,342	342,891	261,253	2,449	3,902	5,107	72,211
OUTWARD.										
To—										
New South Wales ..	18,465	108,343	261,348	978,075	585,525	329,848	1,173	2,289	9,275	144,060
Northern Territory ..	953	4,636	1,168	3,640	..	..	..	..	..	..
South Australia ..	734	2,632	16,502	76,979	..	..	..	..	†399	9,434
Totals	20,152	115,611	279,018	1,058,694	585,525	329,848	1,173	2,289	†9,674	153,494

* Based on Brisbane Market Value.

† Including 108 bales of scoured wool.

Table No. XVI.

RETURN SHOWING THE NUMBER, &c., OF BACON-CURING AND MEAT-PRESERVING WORKS FOR THE YEAR ENDED 30TH JUNE, 1934, AND INCREASE OR DECREASE ON PREVIOUS YEAR.

Kind of Establishment.	Number.	Number of Hands Employed.	Value of Machinery and Plant.	Value of Land and Buildings.	Value of Output.
			£	£	£
Bacon Curing	9	566	120,418	211,686	989,363
Meat Preserving	8	2,201	591,738	990,649	3,406,288
Totals, 1933-34	17	2,767	712,156	1,202,335	4,395,651
Totals, 1932-33	16	2,684	664,215	1,188,461	4,031,444
Increase, 1933-34 ...	1	83	47,941	13,874	364,207
Decrease, 1933-34 ...	...	...	...	...	...

Table No. XVII.

RETURN SHOWING NUMBER OF SWINE SLAUGHTERED AND THE PRODUCTS THEREOF, AT MEATWORKS, BACON FACTORIES, ABATTOIR, AND ON FARMS, IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE FOR THE YEAR 1934.

Petty Sessions District.	Swine Slaughtered.	Pork.		Bacon and Ham.
		Fresh, Frozen, and Chilled.	Salt.	
	Number.	Lb.	Lb.	Lb.
Atherton	22	925	695	255
Bowen	11	280	70	60
Brisbane*	273,496	9,017,183	620	13,559,990
Bundaberg	143	2,210	90	15,470
Clifton	156	3,483	5,932	11,167
Crow's Nest	204	14,094	4,540	11,941
Dalby	99	2,570	4,016	5,563
Gatton	212	11,997	8,679	12,135
Gayndah	183	7,475	10,510	6,861
Gladstone	143	6,068	2,700	1,615
Gympie	50	1,570	2,495	1,085
Harrisville	146	3,885	11,110	5,308
Killarney	56	592	1,310	4,859
Laidley	192	3,416	5,392	24,360
Logan	213	5,890	13,993	9,283
Lowood	139	2,012	10,995	11,344
Mackay	51	1,595	1,565	1,920
Marburg	153	1,705	20,281	2,532
Mareeba	7,432	50,100	...	502,804
Maryborough	8,027	807	2,080	624,184
Nanango	260	6,279	11,326	14,284
Oakey	346	8,734	20,294	19,186
Pittsworth	76	3,843	2,627	3,188
Rockhampton	7,226	215,684	1,772	331,092
Roma	36	1,816	1,585	710
Toogoolawah	96	1,660	11,945	1,620
Toowoomba	73,925	205,876	3,675	5,422,655
Warwick	5,330	3,886	3,402	437,821
Wienholt	246	5,174	13,475	7,484
All other Districts	2,298	83,105	55,235	60,038
Totals	† 380,967	9,673,914	232,409	21,110,814

* Including South Brisbane and Wynnum.

† Includes 6,080 swine killed on farms, producing 189,343 lb. of fresh pork, 232,409 lb. salt pork, and 276,695 lb. of bacon and ham, but excludes 4,578 swine slaughtered, carcases of which were subsequently condemned and boiled down, also 6,682 swine slaughtered and used for small goods

N.B.—In addition to the particulars shown in this table, the returns received from slaughter-houses account for 56,242 swine killed, producing 4,679,713 lb. of fresh pork. Thus the total swine killed in the State for pork, bacon and ham was 437,209, pork produced 14,586,036 lb., and bacon and ham 21,110,814 lb.

Table No. XVIII.

RETURN FOR TEN YEARS SHOWING THE QUANTITY AND CONDITION OF WOOL SOLD IN THE BRISBANE MARKET AND THE AMOUNT REALISED.

Year ended 30th June.	No. of sales.	Greasy Wool.			Scoured Wool.			Total Greasy and Scoured Wool.		
		No. of bales.	Weight in lb.	Amount Realised.	No. of bales.	Weight in lb.	Amount Realised.	No. of bales.	Weight in lb.	Amount Realised.
				£			£			£
1926	10	393,035	131,831,309	9,272,791	26,113	5,694,881	696,036	419,148	137,526,190	9,968,827
1927	7	288,351	94,904,935	7,076,868	28,289	6,079,800	847,811	316,640	100,984,735	7,924,679
1928	7	313,793	103,338,556	8,238,293	27,986	5,961,162	909,878	341,779	109,299,718	9,148,171
1929	8	346,259	113,454,571	7,410,209	30,002	6,201,171	770,577	376,261	119,655,742	8,180,786
1930	10	377,730	122,773,424	5,247,977	33,103	6,744,969	517,696	410,833	129,518,393	5,765,673
1931	10	427,167	139,749,813	5,403,678	29,872	6,171,041	354,427	457,039	145,920,854	5,758,105
1932	11	408,417	131,610,148	4,242,897	37,660	7,691,122	407,395	446,077	139,301,270	4,650,292
1933	10	436,385	141,636,469	5,596,119	64,137	13,387,762	907,239	500,522	155,024,231	6,503,358
1934	7	302,938	97,302,028	6,289,245	50,098	10,469,300	1,164,405	353,036	107,771,328	7,453,650
1935	13	490,804	156,152,802	6,755,127	60,135	12,149,794	941,127	550,939	168,302,596	7,696,254

Table No. XIX.

RETURN FOR TEN YEARS SHOWING THE AVERAGE PRICE REALISED AT THE BRISBANE WOOL SALES.

Year ended 30th June.	1926.	1927.	1928.	1929.	1930.	1931.	1932	1933.	1934.	1935.
	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.
Greasy wool ..	16·88	17·90	19·13	15·68	10·26	9·28	7·74	9·48	15·51	10·38
Scoured wool ..	29·33	33·47	36·63	29·82	18·42	13·78	12·71	16·26	26·69	18·59

Table No. XX.

WOOL.

RETURN FOR TEN YEARS SHOWING THE NUMBER OF SHEEP SHORN AND THE WOOL PRODUCED IN QUEENSLAND.

For details for the year ended 30th June, 1934, see Tables No. XLVI., XLVII., and XLVIII.

Production of Wool.	1924-5.	1925-6.	1926-7.	1927-8.	1928-9.
Number of sheep shorn	18,518,682	20,552,992	17,600,510	16,961,698	18,438,630
Result off Shears only, lb. net— Greasy wool	123,078,294	129,361,017	104,308,040	110,611,493	121,219,173
Scoured wool	7,099,421	7,156,291	5,964,445	6,085,234	6,234,550
*Above expressed as Greasy	137,277,136	143,673,599	116,236,930	122,781,961	134,727,365
Average weight, lb.— Per Greasy bale	346	341	335	335	333
Per Scoured bale	238	229	221	217	17
Per Fleece in the Grease	7·41	6·99	6·60	7·24	7·31
Total wool production (Greasy), including quantity fellmongered, exported on skins, and utilised, lb.	**140,862,541**	**146,985,689**	**119,847,967**	**126,429,938**	**138,988,930**
Estimated value of production	†£15,553,572	†£10,993,305	†£9,423,046	†£10,635,919	†£9,943,540

Production of Wool.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.
Number of sheep shorn	20,733,054	22,778,181	23,183,705	22,407,859	20,776,320
Result off Shears only, lb. net— Greasy wool	138,030,120	158,468,047	156,199,991	146,708,631	137,326,080
Scoured wool	8,278,574	7,445,725	9,204,320	12,449,333	10,868,347
*Above expressed as Greasy	155,967,030	174,600,451	176,142,684	173,682,186	160,874,165
Average weight, lb.— Per Greasy bale	333	333	327	329	328
Per Scoured bale	222	215	207	207	211
Per Fleece in the Grease	7·52	7·67	7·60	7·75	7·74
Total wool production (Greasy), including quantity fellmongered, exported on skins, and utilised, lb.	**‡ 161,087,873**	**‡ 182,061,407**	**‡ 184,716,462**	**‡185,833,546**	**‡169,989,516**
Estimated value of production	†£7,785,914	†£7,479,689	†£6,626,703	†£6,976,501	‖ £10,227,703

* From 1st July, 1928, scoured wool has been converted into the estimated greasy equivalent on the assumption that 1lb. scoured wool is produced from 2¼ lb. greasy. In previous years a ratio of 1 to 2 was used.

† Based on Export value (Financial Year) as declared to the Customs Department. ‡ Including dead wool (not previously collected).

‖ Based on average price realised at Brisbane Wool Sales for the 1933-34 clip.

Table No. XXI.

RETURN FOR TEN YEARS SHOWING THE AVERAGE OVERSEA EXPORT VALUE OF WOOL FROM QUEENSLAND.

Year ended 30th June.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.	Per lb.
Greasy wool ...	17·95d.	18·87d.	20·19d.	17·17d.	11·60d.	9·86d.	8·61d.	9·01d.	15 11d.	10·53d.
Scoured wool ...	30·86d.	31·40d.	34·48d.	31·44d.	22·34d.	14·76d.	13·45d.	14·73d.	24·10d.	18·22d.

Table No. XXII.

RETURN FOR TEN YEARS SHOWING THE QUANTITY AND VALUE OF WOOL EXPORTED **Oversea** FROM QUEENSLAND.

Exports of Wool, Oversea Only.	Greasy.		Scoured.		Woolled Skins.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Year.	Lb. gross.	£	Lb. gross.	£	Lb. gross.	£
1925-1926	155,529,490	11,636,937	10,166,018	1,307,051	3,804,570	202,368
1926-1927	92,434,753	7,267,525	9,371,143	1,225,868	3,580,864	171,847
1927-1928	98,572,221	8,290,737	10,645,113	1,529,291	3,330,919	179,349
1928-1929	115,370,996	8,256,965	11,785,858	1,544,164	4,287,380	221,428
1929-1930	122,023,953	5,898,865	10,911,832	1,015,954	5,720,343	177,406
1930-1931	146,129,752	6,005,219	10,890,695	669,823	5,758,382	112,783
1931-1932	149,541,226	5,367,646	14,198,049	795,779	5,018,095	77,968
1932-1933	142,716,884	5,359,620	17,193,918	1,055,563	4,112,509	67,419
1933-1934	128,534,115	8,094,432	18,716,446	1,879,241	2,934,525	84,241
1934-1935	137,837,068	6,047,655	17,424,690	1,322,716	3,042,533	66,529

Table No. XXIII.

RETURN FOR TEN YEARS SHOWING THE AMOUNT OF SCOURED WOOL USED IN MANUFACTURE.

	1925-26.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.
Quantity of Scoured Wool used in manufacture ...	Lb. 454,075	Lb. 625,342	Lb. 625,852	Lb. 477,008	Lb. 572,237	Lb. 440,756	Lb. 541,451	Lb. 794,559	Lb. 787,952	Lb. 777,297

Table No. XXIV.

RETURN FOR TWO YEARS SHOWING THE EXPORT **Oversea** OF HOME PRODUCE.

Value of—	1932-33.		1933-34.	
	Home Produce only.		Home Produce only.	
	Total Exports.	Percentage to Total Exports.	Total Exports.	Percentage to Total Exports.
	£		£	
Agricultural and Dairy Products	4,818,753	31·74	6,112,822	31·30
*Pastoral ,, ...	8,603,118	56·66	12,453,389	63·76
Mineral ,, ...	788,788	5·19	743,586	3·81
Other ,, ...	973,862	6·41	220,715	1·13
Totals	£15,184,521	100·00	£19,530,512	100·00

* Exclusive of Furred Skins:—1932-33, £3,477; 1933-34, £16,148.

Table No. XXV.

RETURN FOR TWO YEARS SHOWING THE DETAILS OF PASTORAL PRODUCTS EXPORTED **Oversea.**

Value of—	1932-33.	1933-34.	Increase or —Decrease, 1933-34.
	Home Produce only.		
	Exports Oversea.	Exports Oversea.	
Pastoral Products—	£	£	£
Wool	6,415,183	9,973,880	3,558,697
Live stock (Horses, Cattle, and Sheep)	14,923	26,836	11,913
*Meat (all kinds, including Extract)	1,793,369	2,036,349	242,980
Tallow	149,252	116,040	— 33,212
†Hides and skins	184,524	240,005	55,481
Leather	8,791	14,588	5,797
All other	37,076	45,691	8,615
Totals	8,603,118	12,453,389	3,850,271

* Exclusive of Bacon, Ham, Pork and Poultry, these being treated as products of Agriculture —1932-33, £40,514; 1933-34, £185,484.
† Exclusive of Furred Skins:—1932-33, £3,477; 1933-34, £16,148.

Table No. XXVI.

RETURN FOR TEN YEARS SHOWING THE NUMBER OF COMMON GOATS IN THE STATE AND THE NUMBER KILLED FOR FOOD, &c.

Year ended 31st December—	Number Depastured.	Number Killed for Food.	Weight: Lb.	Average Weight: Lb	Number of Skins Sold or Utilised.
1925	126,752	25,141	717,087	28·52	11,305
1926	86,012	14,252	395,028	27·72	9,409
1927	95,227	16,657	470,378	28·24	10,447
1928	85,622	14,888	417,305	28·03	9,261
1929	82,360	14,983	434,380	28·99	9,581
1930	69,460	11,195	307,177	27·44	6,169
1931	73,739	14,483	375,872	25·95	6,632
1932	76,986	15,175	421,016	27·74	6,057
1933	81,768	16,973	479,312	28·24	8,082
1934	*79,333	12,670	325,719	25·71	†5,380

* Including 151 Saanen Goats. † Value of Skins, £295.

Table No. XXVII.

RETURN FOR TEN YEARS SHOWING THE NUMBER OF ANGORA GOATS IN THE STATE AND THE NUMBER KILLED FOR FOOD, MOHAIR OBTAINED, &c.

Year ended 31st December.	Number Depastured.	Mohair Sold or Utilised.	Number Killed for Food.	Weight: Lb.	Average Weight: Lb.	Number of Skins Sold or Utilised.
		Lb.				
1925	3,923	1,604	554	15,800	28·52	520
1926	3,343	1,532	590	17,003	28·82	487
1927	2,354	1,765	303	9,629	31 78	239
1928	2,938	2,137	673	19,429	28·87	648
1929	2,215	1,425	467	14,127	30·25	360
1930	1,840	1,288	276	8,034	29·11	310
1931	1,683	972	205	5,955	29·05	145
1932	1,516	756	227	6,633	29·22	166
1933	1,375	444	178	5,195	29·19	106
1934	1,089	†267	147	4,202	28·59	‡98

† Value of Mohair, £4. ‡ Value of Skins, £4.

Table No. XXVIII.

RETURN FOR TEN YEARS SHOWING THE NUMBER OF CAMELS, DONKEYS, AND MULES IN THE STATE, TOGETHER WITH THE CENTESIMAL INCREASE OR DECREASE.

Year ended 31st December.	Number of Camels.	Increase or Decrease.	Number of Donkeys.	Increase or Decrease.	Number of Mules.	Increase or Decrease.
1925	480	32·60	11	— 71·79	925	— 6·75
1926	313	— 34·79	26	13·64	906	— 2·05
1927	440	40·58	23	— 11·54	898	— 0·88
1928	466	5·91	25	8·70	980	9·13
1929	354	— 24·03	30	20·00	972	— 0·82
1930	215	— 39·27	18	— 40·00	627	— 35·49
1931	433	101·40	33	83·33	838	33·65
1932	502	15·94	44	33·33	798	— 4·77
1933	702	39·84	91	106·82	1,015	27·19
1934	614	— 12·54	42	— 53·85	758	— 25·32

— Decrease.

Table No. XXIX.

RETURN FOR TEN YEARS SHOWING THE NUMBER OF CALVES RETURNED AS BRANDED AND THE CENTESIMAL INCREASE OR DECREASE. *For details for* 1934 *see Table XXXI.*

Year ended 31st December.	Male.	Increase or Decrease.	Female.	Increase or Decrease.	Total.	Increase or Decrease.
1925	612,606	20·51	660,784	19·24	1,273,390	19·85
1926	409,702	— 33·12	450,373	— 31·84	860,075	— 32·46
1927	374,849	— 8·51	420,822	— 6·56	795,671	— 7·49
1928	468,581	25·01	520,986	23·80	989,567	24·37
1929	468,006	— 0·12	528,548	1·45	996,554	0·71
1930	506,434	8·21	565,408	6·97	1,071,842	7·55
1931	489,148	— 3·41	559,251	— 1·09	1,048,399	— 2·19
1932	449,537	— 8·10	534,252	— 4·47	983,789	— 6·16
1933	488,928	8·76	572,843	7·22	1,061,771	7·93
1934	560,511	14·64	643,368	12·31	1,203,879	13·38

— Decrease.

Table No. XXX.

RETURN SHOWING THE NUMBER OF HORSES, CATTLE, SHEEP, AND SWINE, IN THE VARIOUS PETTY SESSIONS DISTRICTS OF THE STATE, TOGETHER WITH THE INCREASE OR DECREASE OF CATTLE AND SHEEP ON 31ST DECEMBER, 1934.

Petty Sessions District.	Horses.	Cattle.				Sheep.				Swine.
				1934.				1934.		
	1934.	1933.	1934.	Increase.	Decrease.	1933.	1934.	Increase.	Decrease.	1934.
Adavale	1,017	5,439	5,384	..	55	185,710	237,653	51,943	..	..
Allora	3,476	14,271	15,561	1,290	..	8,180	7,057	..	1,123	3,688
Alpha	4,219	53,328	57,567	4,239	..	179,565	181,085	1,520	..	101
Aramac	1,919	3,067	3,969	902	..	334,738	392,631	57,893	..	..
Atherton	3,644	48,235	48,609	374	..	408	198	..	210	7,528
Augathella	2,213	27,335	28,822	1,487	..	284,885	333,498	48,613	..	32
Ayr	7,527	35,031	36,427	1,396	..	225	1,438	1,213	..	642
Banana	2,054	54,638	60,467	5,829	..	210	240	30	..	118
Barcaldine	1,628	5,147	3,696	..	1,451	470,857	539,249	68,392	..	133
Beaudesert	4,369	80,060	80,295	235	..	1,865	815	..	1,050	12,767
Biggenden	2,716	47,287	48,431	1,144	..	172	241	69	..	2,565
Blackall	2,898	7,601	5,752	..	1,849	739,080	799,436	60,356	..	112
Bollon	1,412	13,284	8,923	..	4,361	410,256	464,676	54,420	..	30
Boulia	2,045	35,236	41,221	5,985	..	242,833	237,776	..	5,057	71
Bowen	3,692	24,193	28,225	4,032	..	..	41	41	..	544
Brisbane	3,733	21,972	22,203	231	..	174	124	..	50	2,642
Bundaberg	6,144	58,510	61,224	2,714	..	2,695	1,910	..	785	1,759
Burke	2,681	99,559	81,109	..	18,450	40,089	23,219	..	16,870	151
Caboolture	830	9,330	9,352	22	..	190	138	..	52	882
Cairns	2,352	4,004	4,477	473	..	20	94	74	..	209
Camooweal	1,975	65,564	64,184	..	1,380	15,098	15,025	..	73	131
Cape River	5,327	90,298	88,515	..	1,783	379	280	..	99	166
Cardwell	1,428	5,833	6,509	676	..	..	..	..	..	41
Charleville	3,515	22,776	26,423	3,647	..	770,692	862,432	91,740	..	223
Charters Towers	9,564	155,875	168,044	12,169	..	1,097	1,110	13	..	738
Childers	1,982	14,068	14,783	715	..	..	32	32	..	337
Chillagoe	2,285	30,599	30,120	..	479	..	..	..	..	12
Chinchilla	3,914	53,766	66,886	13,120	..	34,813	34,520	..	293	1,960
Clermont	8,489	131,941	148,177	16,236	..	603,248	647,251	44,003	..	329
Cleveland	674	1,491	1,497	6	..	36	23	..	13	180
Clifton	4,622	20,625	19,581	..	1,044	25,737	28,562	2,825	..	5,246
Cloncurry	12,102	195,492	204,674	9,185	..	976,494	986,614	10,120	..	1,018
Coen	2,128	23,481	26,250	2,769	..	..	..	..	..	..
Collinsville	4,036	135,968	149,397	13,429	..	50	50	..	..	157
Condamine	3,713	58,752	69,696	10,944	..	38,269	44,649	6,380	..	807
Cook	3,790	81,485	83,488	2,003	..	..	..	..	..	21
Crow's Nest	2,957	26,956	28,580	1,624	..	306	194	..	112	9,799
Croydon	1,726	24,209	22,109	..	2,100	..	..	..	..	..
Cunnamulla	3,070	16,798	16,942	144	..	1,200,360	1,288,898	88,538	..	118
Dalby	9,701	124,685	139,190	14,505	..	580,289	591,533	11,244	..	7,413
Diamantina	1,107	34,464	41,465	7,001	..	7	..	..	7	..
Douglas	1,243	3,796	3,813	17	..	..	..	..	..	166
Dugandan	4,624	43,279	44,036	757	..	127	153	26	..	11,651
Eidsvold	2,682	54,460	55,085	625	..	385	370	..	15	992
Emerald	3,096	48,493	52,115	3,622	..	211,812	277,608	65,796	..	157
Esk	1,863	31,042	32,161	1,119	..	838	2,113	1,275	..	2,858
Etheridge	8,680	184,455	183,569	..	886	..	..	..	..	112
Eulo	950	7,785	7,562	..	223	243,068	297,325	54,257	..	..
Gatton	3,828	28,422	28,785	363	..	585	472	..	113	6,223
Gayndah	6,539	137,708	139,355	1,647	..	485	554	69	..	6,750
Gin Gin	3,630	55,320	56,739	1,419	..	255	237	..	18	607
Gladstone	6,668	147,725	150,434	2,709	..	2,521	2,565	44	..	1,586
Goodna	439	2,444	2,603	159	..	11	12	1	..	159
Goondiwindi	3,413	46,962	50,968	4,006	..	634,089	652,828	18,739	..	322
Gympie	6,084	124,722	131,135	6,413	..	662	782	120	..	13,984
Harrisville	2,798	22,057	22,782	725	..	367	306	..	61	5,684
Herberton	4,276	65,155	70,127	4,972	..	42	41	..	1	495
Hughenden	4,409	54,033	54,599	566	..	710,734	767,727	56,993	..	88
Hungerford	517	3,161	6,385	3,224	..	109,683	139,067	29,384	..	..
Ingham	6,449	37,346	36,982	..	364	113	88	..	25	662
Inglewood	2,361	21,421	25,776	4,355	..	293,994	304,173	10,179	..	744
Innisfail	2,721	4,864	4,600	..	264	100	..	..	100	150
Ipswich	1,815	15,588	16,721	1,133	..	78	115	37	..	1,502
Isisford	2,159	6,344	5,859	..	485	498,513	555,884	57,371	..	41
Julia Creek	3,118	58,449	58,045	..	404	579,434	577,788	..	1,646	..
Jundah	1,997	16,791	21,156	4,365	..	195,890	220,244	24,354	..	..
Kilcoy	1,270	17,808	19,655	1,847	..	155	47	..	108	3,317
Kilkivan	1,202	21,384	22,312	928	..	98	109	11	..	1,041
Killarney	2,302	12,791	13,131	340	..	4,573	2,964	..	1,609	1,523
Laidley	3,145	19,506	18,906	..	600	71	67	..	4	4,398
Logan	1,862	16,845	16,879	34	..	327	175	..	152	1,858
Longreach	5,229	16,452	14,153	..	2,299	1,251,654	1,413,999	162,345	..	106
Lowood	1,849	17,178	17,478	300	..	..	..	..	..	3,735
Mackay	21,430	135,493	146,342	10,849	..	1,776	1,405	..	371	1,303
Marburg	1,433	8,596	8,857	261	..	1	4	3	..	3,376
Mareeba	2,882	18,525	18,793	268	..	10	10	..	..	159
Maroochy	2,678	44,289	44,230	..	59	276	227	..	49	5,211
Maryborough	3,742	26,028	26,873	845	..	548	572	24	..	1,036
Mitchell	5,970	71,059	81,134	10,075	..	487,496	586,498	99,002	..	125
Monto	3,772	52,130	60,238	8,108	..	1,045	997	..	48	2,590
Mount Isa	300	825	1,042	217	..	..	..	..	..	30
Mount Morgan	6,854	83,401	98,923	15,522	..	1,521	1,692	171	..	1,851
Mount Perry	1,493	32,845	35,594	2,749	..	30	13	..	17	89
Muttaburra	2,571	10,633	9,552	..	1,081	1,137,123	1,110,616	..	26,507	3
Nanango	10,636	115,725	122,721	6,996	..	1,706	1,992	286	..	22,575
Norman	5,963	188,785	177,523	..	11,262	5,504	4,096	..	1,408	45
Oakey	8,719	79,464	86,847	7,383	..	132,186	119,689	..	12,497	20,898
Pittsworth	6,213	42,134	46,344	4,210	..	162,950	181,898	18,948	..	8,459
Proserpine	4,203	12,720	14,223	1,503	..	1,675	1,530	..	145	190

Table No. XXX.—*continued.*

RETURN SHOWING THE NUMBER OF HORSES, CATTLE, SHEEP, AND SWINE, IN THE VARIOUS PETTY SESSIONS DISTRICTS OF THE STATE, TOGETHER WITH THE INCREASE OR DECREASE OF CATTLE AND SHEEP ON 31ST DECEMBER, 1934.

Petty Sessions District.	Horses.	Cattle.				Sheep.				Swine.
				1934.				1934.		
	1934.	1933.	1934.	Increase.	Decrease.	1933.	1934.	Increase.	Decrease.	1934.
Quilpie	2,833	35,634	31,725	..	3,909	632,367	660,513	28,146	..	11
Ravenswood	1,146	17,351	16,463	..	888	..	..	..	..	48
Redcliffe	1,511	18,999	19,202	203	..	320	189	..	131	882
Richmond	5,120	50,530	48,397	..	2,133	992,565	961,165	..	31,400	52
Rockhampton	14,920	359,013	374,501	15,488	..	23,886	21,740	..	2,146	3,657
Roma	7,452	74,356	77,330	2,974	..	470,168	539,687	69,519	..	846
Rosewood	2,413	24,194	24,513	319	..	459	723	264	..	4,732
St. George	3,838	22,212	23,623	1,411	..	1,091,973	1,237,758	145,785	..	78
St. Lawrence	4,377	118,707	128,978	10,271	..	2,473	2,750	277	..	93
Somerset	375	983	1,080	97	..	..	..	..	..	101
Southport	2,161	38,458	39,140	682	..	311	378	67	..	5,091
Springsure	5,028	86,727	93,220	6,493	..	227,958	247,039	19,081	..	96
Stanthorpe	1,668	10,374	10,781	407	..	268,430	270,237	1,807	..	213
Surat	1,804	15,986	13,668	..	2,318	483,921	524,618	40,697	..	35
Tambo	1,959	18,071	23,166	5,095	..	447,848	483,476	35,628	..	14
Taroom	3,177	106,562	111,248	4,686	..	22,816	22,062	..	754	61
Texas	1,258	12,699	11,483	..	1,216	111,207	116,640	5,433	..	407
Thargomindah	2,290	50,943	50,672	..	271	22,970	27,396	4,426	..	2
Tiaro	3,166	54,262	55,255	993	..	327	299	..	28	2,338
Toogoolawah	3,507	53,904	56,768	2,864	..	423	504	81	..	6,675
Toowoomba	6,645	44,398	46,034	1,636	..	9,696	17,116	7,420	..	9,783
Townsville	3,165	27,090	29,197	2,107	..	1,424	1,265	..	159	1,003
Warwick	7,811	52,382	51,912	..	470	239,693	248,764	9,071	..	4,550
Wienholt	10,210	140,446	146,062	5,616	..	506	520	14	..	24,658
Windorah	2,948	47,834	54,606	6,772	..	174,827	184,152	9,325	..	1
Winton	4,345	33,775	45,165	11,390	..	1,018,136	1,048,346	30,210	..	15
Woodford	1,470	24,885	25,812	927	..	453	355	..	98	2,774
Wynnum	438	2,001	1,995	..	6	11	4	..	7	121
Yeulba	818	9,303	9,279	..	24	4,098	4,742	644	..	15
Total in State, 1934	448,604	..	*6,052,641	333,585	62,114	..	21,574,182	1,606,789	105,411	269,873
Total in State, 1933	450,024	..	†5,781,170	..	..	..	20,072,804	..	..	217,448
Increase, 1934	..	..	..	271,471		..	..	1,501,378		52,425
Decrease, 1934	1,420	..	..	..		..	..	..		..
Centesimal Increase, 1934	..	..	..	4·70		..	..	7·48		24·11
Centesimal Decrease, 1934	0·32	..	..	..		..	..	..		..

* Including 939,254 Dairy Cattle.

† Including 877,409 Dairy Cattle.

Table No. XXXI.

RETURN SHOWING NUMBER OF CALVES RETURNED AS BRANDED IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE DURING THE YEARS 1933 AND 1934, THE CENTESIMAL INCREASE OR DECREASE, ALSO THE NUMBER OF CATTLE AND SHEEP KILLED FOR FARM OR STATION USE DURING THE LATTER YEAR.

Petty Sessions District.	Male.			Female.			Cattle Killed.	Sheep Killed.
	1933.	1934.	Increase or Decrease.	1933.	1934.	Increase or Decrease.	1934.	1934.
Adavale	491	503	2·44	459	522	13·73	138	3,101
Allora	1,056	1,287	21·88	1,186	1,518	27·99	14	250
Alpha	5,695	5,828	2·34	5,730	5,843	1·97	301	2,201
Aramac	344	650	88·95	315	582	84·76	44	4,036
Atherton	539	413	— 23·38	3,955	3,356	— 15·15	77	6
Augathella	3,809	3,989	4·73	3,795	3,797	0·05	267	3,886
Ayr	3,128	3,134	0·19	2,848	3,047	6·99	106	..
Banana	5,720	7,758	35·63	5,933	7,811	31·65	308	23
Barcaldine	467	370	— 20·77	494	359	— 27·33	20	6,181
Beaudesert	2,163	1,981	— 8·41	6,117	5,951	— 2·71	164	137
Biggenden	1,509	2,243	48·64	4,012	4,914	22·48	174	5
Blackall	988	490	— 50·41	1,052	514	— 51·14	83	11,002
Bollon	882	898	1·81	821	922	12·30	160	5,910
Boulia	2,619	3,723	42·15	2,705	3,630	34·20	260	2,175
Bowen	2,411	3,211	33·18	2,380	3,061	28·61	164	..
Brisbane	52	51	— 1·92	1,393	1,189	— 14·65	4	..
Bundaberg	2,379	3,406	43·17	3,923	5,545	41·35	343	127
Burke	10,207	10,805	5·86	10,345	10,950	5·85	584	200
Caboolture	88	118	34·09	861	826	— 4·07	29	5
Cairns	149	167	12·08	203	257	26·60	35	..
Camooweal	9,118	9,613	5·43	9,249	9,484	2·54	496	150
Cape River	10,884	11,429	5·01	10,839	11,322	4·46	444	18
Cardwell	546	610	11·72	678	653	— 3·69	42	..
Charleville	1,858	1,690	— 9·04	1,878	1,732	— 7·77	204	12,259
Charters Towers	19,089	22,942	20·18	18,933	22,952	21·23	814	36
Childers	872	1,080	23·85	1,177	1,351	14·78	20	..
Chillagoe	1,860	2,540	36·56	1,963	2,640	34·49	161	..
Chinchilla	5,744	7,443	29·58	6,403	7,879	23·05	322	546
Clermont	16,027	20,106	25·45	16,282	20,187	23·98	1,047	7,673
Cleveland	8	9	12·50	81	60	— 25·93	..	..
Clifton	1,073	1,143	6·52	2,088	2,193	5·03	74	679
Cloncurry	24,971	30,844	23·52	25,460	30,936	21·51	1,560	7,924
Coen	2,719	3,547	30·45	2,776	3,542	27·59	165	..
Collinsville	17,402	16,870	— 3·06	17,115	16,953	— 0·95	649	15
Condamine	6,783	8,281	22·09	6,708	8,063	20·20	608	950
Cook	6,466	9,321	24·85	7,255	8,789	21·14	465	..
Crow's Nest	980	1,173	19·69	1,872	2,280	21·80	63	18
Croydon	1,756	2,423	37·98	1,821	2,489	36·68	107	..
Cunnamulla	1,706	1,487	— 12·84	1,639	1,446	— 11·78	109	16,022
Dalby	10,650	12,080	13·43	13,313	15,152	13·81	683	8,108
Diamantina	2,882	4,782	65·93	2,778	3,870	39·31	156	..
Douglas	109	128	17·43	182	213	17·03	17	..
Dugandan	1,281	1,436	12·10	2,912	3,166	8·72	74	11
Eidsvold	4,763	5,286	10·98	5,673	6,141	8·25	270	10
Emerald	5,248	6,548	24·77	5,189	6,384	23·03	222	2,713
Esk	1,126	1,222	8·53	1,684	1,712	1·66	144	70
Etheridge	15,027	20,140	34·03	15,369	19,768	28·62	893	..
Eulo	444	392	— 11·71	456	378	— 17·11	40	2,715
Gatton	984	1,105	12·30	1,705	1,844	8·15	81	46
Gayndah	8,862	9,690	9·34	12,340	13,536	9·69	491	37
Gin Gin	3,624	4,923	35·84	3,983	5,473	37·41	332	20
Gladstone	8,161	10,946	34·13	11,187	13,856	23·86	625	87
Goodna	83	53	— 36·15	163	200	22·70	..	..
Goondiwindi	5,867	6,624	12·90	5,838	6,641	13·76	384	9,901
Gympie	1,369	1,449	5·84	9,087	9,513	4·69	293	16
Harrisville	558	604	8·24	1,724	1,859	7·83	96	..
Herberton	5,672	7,139	25·86	6,261	7,327	17·03	230	..
Hughenden	6,349	6,283	— 1·04	6,433	6,317	— 1·80	273	7,352
Hungerford	308	261	— 15·26	315	272	— 13·65	49	2,116
Ingham	3,445	3,475	8·71	3,462	3,498	1·04	152	..
Inglewood	2,609	3,273	25·45	2,795	3,364	20·36	292	4,266
Innisfail	266	212	— 20·30	258	241	— 6·59	5	..
Ipswich	400	343	— 14·25	1,388	1,375	— 0·94	9	3
Isisford	935	610	— 34·76	941	615	— 34·64	90	7,878
Julia Creek	5,283	7,721	46·15	5,616	7,858	39·92	328	5,950
Jundah	1,369	2,255	64·72	1,414	2,195	55·23	206	1,800
Kilcoy	405	331	— 18·27	1,176	1,205	2·47	64	..
Kilkivan	964	1,061	10·06	1,663	1,818	9·32	81	11
Killarney	801	909	13·48	1,135	1,202	5·90	65	47
Laidley	454	482	6·17	969	1,250	29·00	43	7
Logan	50	97	94·00	1,107	997	— 9·94	17	20
Longreach	1,908	1,532	— 19·71	1,976	1,543	— 21·91	151	16,320
Lowood	548	553	0·91	898	822	— 8·46	55	..

Table No. XXXI.—*continued.*

RETURN SHOWING NUMBER OF CALVES RETURNED AS BRANDED IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE DURING THE YEARS 1933 AND 1934, THE CENTESIMAL INCREASE OR DECREASE, ALSO THE NUMBER OF CATTLE AND SHEEP KILLED FOR FARM OR STATION USE DURING THE LATTER YEAR.

Petty Sessions District.	Male.			Female.			Cattle Killed.	Sheep Killed.
	1933.	1934.	Increase or Decrease.	1933.	1934.	Increase or Decrease.	1934.	1934.
Mackay	14,257	14,381	0·87	14,814	15,170	2·40	536	50
Marburg	91	98	7·69	485	513	5·77	39	..
Mareeba	1,388	1,707	22·98	1,553	1,728	11·27	86	..
Maroochy	377	350	— 7·16	3,163	2,660	15·90	70	7
Maryborough	793	989	24·72	1,852	2,112	14·04	321	..
Mitchell	8,901	10,277	15·46	8,973	10,747	19·77	809	7,539
Monto	3,306	4,549	37·60	5,109	7,209	41·10	426	4
Mount Isa	143	155	8·39	154	154	..	14	..
Mount Morgan	5,604	8,151	45·45	7,646	7,732	1·13	489	63
Mount Perry	2,460	3,355	36·38	2,508	3,386	35·01	169	..
Muttaburra	1,020	804	— 21·18	1,042	852	— 18·23	124	10,487
Nanango	5,073	5,514	8·69	9,433	10,536	11·69	563	78
Norman	22,009	22,413	1·84	21,943	22,480	2·45	1,190	25
Oakey	3,238	3,812	17·73	6,661	8,113	21·80	377	2,339
Pittsworth	2,096	2,924	39·50	3,793	4,670	23·12	124	3,123
Proserpine	1,103	1,632	47·96	1,107	1,706	54·11	48	30
Quilpie	4,086	3,684	— 9·84	4,026	3,638	— 9·64	315	6,218
Ravenswood	2,962	2,590	— 12·56	2,854	2,460	— 13·81	90	..
Redcliffe	57	101	77·19	1,005	855	— 14·93	12	..
Richmond	4,109	5,502	33·90	4,397	5,461	24·20	322	8,997
Rockhampton	33,382	39,327	17·81	35,588	41,472	16·53	1,647	431
Roma	9,645	9,956	3·22	9,866	9,978	1·14	777	6,853
Rosewood	452	523	15·71	1,387	1,624	17·09	7	105
St. George	2,207	2,563	16·13	2,152	2,455	14·08	424	20,256
St. Lawrence	14,815	15,845	6·95	14,810	15,889	7·29	576	40
Somerset	64	85	32·81	63	95	50·79	25	..
Southport	265	294	10·94	3,095	3,064	— 1·00	50	20
Springsure	11,651	11,871	1·89	11,607	11,629	0·19	514	2,286
Stanthorpe	1,061	1,175	10·75	1,144	1,226	7·17	101	3,166
Surat	2,268	1,674	— 26·19	2,139	1,639	— 23·38	266	7,366
Tambo	2,326	2,461	5·80	2,320	2,530	9·05	144	7,018
Taroom	13,985	14,579	4·25	13,922	14,798	6·29	850	340
Texas	1,285	1,109	— 13·70	1,282	1,184	— 7,64	124	1,784
Thargomindah	4,033	4,950	22·74	3,904	4,880	25·00	591	339
Tiaro	2,331	2,899	24·37	4,427	4,929	11·34	243	8
Toogoolawah	2,185	2,308	5·63	3,367	3,719	10·45	261	10
Toowoomba	1,436	1,759	22·49	4,083	4,593	12·49	80	446
Townsville	3,068	3,193	4·07	2,994	3,207	7·11	100	4
Warwick	4,984	4,590	— 7·91	5,663	5,495	— 2·97	212	3,207
Wienholt	5,909	6,269	6·09	10,809	11,609	7·40	753	8
Windorah	4,957	5,876	18·54	4,786	5,878	22·82	497	2,412
Winton	3,616	5,073	40·29	3,542	4,895	38·20	394	10,940
Woodford	379	429	13·19	1,959	2,021	3·17	95	18
Wynnum	7	3	— 57·14	90	82	— 8·89	..	..
Yeulba	1,182	1,191	0·76	1,192	1,145	— 3·94	128	142
Totals	488,928	560,511	14·64	572,843	643,368	12·31	32,519	261,198

— Decrease.

Table No. XXXII.

RETURN FOR TEN YEARS SHOWING THE NUMBER OF CATTLE AND SHEEP KILLED IN THE STATE FOR FARM OR STATION USE, ALSO THE CENTESIMAL INCREASE OR DECREASE. *For details for* 1934, *see Table XXXI.*

Year ended 31st December.	Cattle.	Increase or Decrease.	Sheep.	Increase or Decrease.
1925	*44,721	..	186,133	3·24
1926	38,617	— 13·65	193,542	3·98
1927	35,885	— 7·07	193,629	0·04
1928	32,068	— 10·64	197,845	2·18
1929	28,194	— 12·08	229,329	15·91
1930	24,802	— 12·03	259,586	13·19
1931	26,857	8·29	268,541	3·45
1932	28,791	7·20	268,876	0·12
1933	30,973	— 7·58	267,644	— 0·46
1934	32,519	4·99	261,198	— 2·41

* First year collected. — Decrease.

Table No. XXXIII.

RETURN FOR TEN YEARS SHOWING THE NUMBER OF CALVES RETURNED AS BRANDED IN THE SEVERAL PASTORAL DISTRICTS OF THE STATE.

Year ended 31st December.	Burke.		Burnett.		Cook.		Darling Downs.		Gregory North.		Gregory South.		Leichhardt.		Maranoa.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1925	103,862	105,081	33,540	43,534	49,704	51,180	42,333	49,873	35,097	34,873	21,142	20,857	84,490	85,189	28,216	28,304
1926	53,868	54,364	27,965	36,879	42,088	43,275	31,968	37,972	16,771	17,460	15,812	16,332	53,921	53,611	22,966	22,900
1927	57,957	58,682	31,635	40,062	40,746	42,888	28,374	34,813	8,684	9,299	10,816	11,022	42,804	43,503	18,010	17,843
1928	67,279	67,954	35,508	47,385	54,459	55,892	35,612	43,770	1,535	1,552	12,676	12,870	66,044	65,327	16,660	16,514
1929	73,733	76,538	37,483	49,664	49,074	51,864	38,616	46,373	2,826	2,828	6,183	5,819	67,980	67,752	18,052	17,758
1930	69,158	68,250	41,851	54,769	52,893	55,761	40,859	48,230	7,318	7,482	5,669	5,566	79,533	80,083	18,128	17,545
1931	72,541	72,645	39,334	54,289	52,572	55,490	42,215	52,101	11,092	11,157	7,917	7,295	75,063	75,376	18,016	17,825
1932	63,072	63,691	32,880	48,809	48,969	53,136	44,526	57,120	14,596	14,336	9,527	9,042	65,953	66,764	18,508	18,902
1933	64,464	65,906	30,842	47,942	41,914	45,924	45,911	58,292	16,281	16,190	10,366	10,050	82,555	83,947	22,041	21,023
1934	76,453	76,672	35,896	55,500	50,347	52,507	53,131	66,898	21,606	20,745	11,955	11,877	91,545	91,961	22,584	22,844

Year ended 31st December.	Mitchell.		Moreton.		North Kennedy.		Port Curtis.		South Kennedy.		Warrego.		Wide Bay.		Total.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1925	20,177	20,200	20,374	35,864	56,020	55,633	33,803	38,117	45,006	44,677	23,347	23,940	14,595	23,462	612,606	660,784
1926	5,777	5,585	15,882	29,238	40,764	40,754	24,059	27,737	26,388	26,163	18,207	17,681	13,266	20,422	409,702	450,373
1927	5,380	5,548	15,406	29,274	40,249	40,221	22,629	26,418	27,388	28,626	11,162	10,745	13,609	21,878	374,849	420,822
1928	7,301	7,424	20,938	37,035	53,152	53,313	32,670	37,791	36,995	36,653	12,402	12,160	15,350	25,346	468,581	520,986
1929	7,770	7,623	25,466	44,262	42,155	42,180	34,860	40,399	37,650	37,355	8,997	9,147	17,161	28,986	468,006	528,548
1930	9,719	9,737	25,456	45,725	44,827	44,962	38,956	42,872	44,004	43,734	10,282	10,360	17,781	30,332	506,434	565,408
1931	7,723	7,751	23,187	45,234	45,145	45,192	38,451	44,380	27,628	27,696	10,668	10,409	17,546	32,411	489,148	559,251
1932	9,337	9,322	18,354	44,632	36,957	37,186	34,265	41,769	26,915	27,286	12,078	11,967	13,645	30,290	449,537	534,252
1933	8,838	8,989	14,865	40,321	53,348	53,413	33,359	41,128	40,167	40,673	12,446	12,366	11,531	26,679	488,928	572,843
1934	7,204	7,174	15,424	41,115	59,897	59,714	43,146	48,408	44,845	45,718	11,974	11,860	14,504	30,375	560,511	643,368

TABLE No. XXXIV

RETURN FOR TEN YEARS SHOWING THE NUMBER OF CATTLE AND SHEEP IN THE SEVERAL PASTORAL DISTRICTS OF THE STATE.

Year ended 31st Dec.	BURKE.		BURNETT.		COOK.		DARLING DOWNS.		GREGORY NORTH.		GREGORY SOUTH.		LEICHHARDT.		MARANOA.	
	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	Sheep.
1925 ..	825,822	2,928,780	467,036	5,263	527,624	270	468,389	1,862,217	297,335	1,964,021	176,275	286,189	761,676	979,070	273,224	2,785,123
1926 ..	685,267	1,978,074	440,562	7,487	520,708	12,580	414,433	2,045,745	212,735	1,086,545	135,915	344,859	568,449	840,487	235,658	3,366,810
1927 ..	640,707	2,523,372	463,258	9,815	495,975	3,355	414,658	2,495,527	135,913	1,054,398	152,891	292,261	533,485	1,050,723	213,221	2,951,182
1928 ..	582,748	2,313,118	483,320	7,702	489,935	3,042	429,716	2,637,366	58,147	702,502	112,514	221,216	562,465	1,172,793	188,546	3,366,073
1929 ..	586,242	2,772,704	506,443	8,161	472,041	2,506	450,071	2,945,532	65,545	1,215,608	83,170	203,830	595,395	1,252,201	176,690	3,542,002
1930 ..	624,489	3,118,929	547,920	7,884	480,650	1,818	469,690	2,757,931	76,530	1,708,231	65,443	327,585	646,023	1,264,970	167,801	3,559,542
1931 ..	612,691	3,006,501	568,567	7,092	513,174	1,246	491,550	2,697,272	95,671	1,963,870	87,917	409,808	656,041	931,260	164,581	3,476,600
1932 ..	553,984	2,180,585	548,849	5,644	501,147	751	509,785	2,570,075	122,354	1,802,425	93,710	446,819	657,561	873,221	170,335	3,606,726
1933 ..	539,181	2,676,981	556,088	4,161	499,581	538	552,706	2,543,077	153,281	1,626,633	107,641	432,215	694,426	966,409	179,551	3,357,037
1934 ..	568,008	2,595,492	581,404	4,398	497,111	302	608,313	2,612,978	183,521	1,672,909	112,585	484,814	742,965	1,077,362	187,422	3,818,971

Year ended 31st Dec.	MITCHELL.		MORETON.		NORTH KENNEDY.		PORT CURTIS.		SOUTH KENNEDY.		WARREGO.		WIDE BAY.		TOTAL.	
	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	Sheep.	Cattle.	Sheep.
1925 ..	196,115	6,696,458	502,658	25,257	503,296	4,528	449,203	27,462	432,297	154,642	236,587	2,938,281	319,108	5,757	6,436,645	20,663,323
1926 ..	114,015	4,135,681	476,828	22,022	454,412	22,214	383,711	28,040	328,545	165,182	191,168	2,799,535	302,439	5,511	5,464,845	16,860,772
1927 ..	90,554	3,715,045	496,342	22,133	442,700	9,928	387,349	29,320	304,395	176,627	152,377	2,303,993	301,979	4,706	5,225,804	16,642,385
1928 ..	68,569	4,893,564	520,775	20,190	461,951	6,589	415,192	29,830	317,997	213,677	128,118	2,915,641	308,348	5,838	5,128,341	18,509,201
1929 ..	67,762	5,337,072	561,468	18,097	454,220	6,718	429,675	33,206	334,775	245,928	101,148	2,735,225	323,943	5,513	5,208,588	20,324,303
1930 ..	74,767	6,280,786	584,841	16,145	462,832	6,950	463,750	31,701	367,446	245,222	96,445	3,208,332	335,097	6,017	5,463,724	22,542,043
1931 ..	72,340	6,126,561	608,304	13,396	435,463	4,195	482,234	28,083	299,127	171,189	103,682	3,481,826	359,050	5,379	5,550,399	22,324,278
1932 ..	85,763	6,071,563	601,566	9,968	437,422	6,140	464,323	27,439	317,989	152,443	113,281	3,554,528	351,996	4,538	5,535,065	21,312,865
1933 ..	80,637	5,124,159	590,867	8,372	472,667	4,684	486,273	27,472	349,810	218,664	114,813	3,077,736	353,648	4,616	5,781,170	20,072,804
1934 ..	76,258	5,611,084	605,864	7,829	502,024	5,586	517,459	25,409	378,663	257,246	123,381	3,388,753	367,663	4,049	6,052,641	21,574,182

Table No. XXXV.

RETURN OF THE NUMBER OF HORSES, CATTLE, SHEEP, AND SWINE IN THE VARIOUS PASTORAL DISTRICTS OF THE STATE AS AT 31ST DECEMBER, 1933 AND 1934, TOGETHER WITH THE NUMERICAL AND CENTESIMAL INCREASE OR DECREASE IN THE LATTER YEAR.

Pastoral District.	Year.	Horses.	Cattle.	Sheep.	Swine.	Numerical Increase or Decrease — Horses.	Cattle.	Sheep.	Swine.	Centesimal Increase or Decrease — Horses.	Cattle.	Sheep.	Swine.
Burke ...	1933	31,421	589,181	2,676,981	615								
	1934	30,548	568,008	2,595,492	1,263	— 873	— 21,173	— 81,489	648	— 2·78	— 3·59	— 3·04	105·37
Burnett ...	1933	34,984	556,088	4,161	42,792								
	1934	36,305	581,404	4,398	57,835	1,321	25,316	237	15,043	3·78	4·55	5·70	35·15
Cook ...	1933	33,640	499,581	538	7,695								
	1934	32,524	497,111	302	8,472	— 1,116	— 2,470	— 236	777	— 3·32	— 0·49	—43·87	10·10
Darling Downs	1933	61,959	552,706	2,543,077	51,331								
	1934	62,017	608,313	2,619,978	61,391	58	55,607	76,901	1,060	0·09	10·06	3·02	19·60
Gregory North	1933	10,562	153,281	1,626,633	110								
	1934	10,342	183,521	1,672,909	311	— 220	30,240	46,276	201	— 2·08	19·73	2·84	182·73
Gregory South	1933	6,139	107,641	432,215	13								
	1934	6,070	112,585	484,814	5	— 69	4,944	52,599	— 8	— 1·12	4·59	12·17	— 61·54
Leichhardt ...	1933	38,354	694,126	966,409	1,481								
	1934	38,562	742,965	1,077,362	1,609	208	48,539	110,953	128	0·54	6·99	11·48	8·64
Maranoa ...	1933	20,337	179,551	3,357,087	1,057								
	1934	20,703	187,422	3,818,971	995	366	7,871	461,884	— 62	1·80	4·38	13·76	— 5·87
Mitchell ...	1933	22,250	80,637	5,124,159	579								
	1934	22,137	76,258	5,611,084	422	— 113	— 4,379	486,925	— 157	— 0·51	— 5·43	9·50	— 27·12
Moreton ...	1933	54,965	590,867	8,372	81,187								
	1934	55,013	605,864	7,829	99,879	48	14,997	543	18,692	0·09	2·54	— 6·49	23·02
North Kennedy	1933	46,510	472,667	4,684	4,273								
	1934	45,208	502,024	5,586	4,522	— 1,302	29,357	902	249	— 2·80	6·21	19·26	5·83
Port Curtis ...	1933	26,641	486,273	27,472	5,907								
	1934	26,743	517,459	25,409	7,281	102	31,186	2,063	1,374	0·38	6·41	— 7·51	23·26
South Kennedy	1933	22,707	349,810	218,664	1,176								
	1934	23,126	378,663	257,246	1,410	419	28,853	38,582	234	1·85	8·25	17·64	19·90
Warrego ...	1933	13,617	114,813	3,077,736	435								
	1934	13,334	123,381	3,388,753	393	— 283	8,568	311,017	— 42	— 2·08	7·46	10·11	— 9·66
Wide Bay ...	1933	25,938	353,648	4,616	18,797								
	1934	25,972	367,663	4,049	24,085	34	14,015	567	5,288	0·13	3·96	—12 28	28·13

Pastoral and Petty Sessions Districts.

Pastoral District.	Petty Sessions District.
Burke	Burke
	Camooweal
	Mt. Isa
	Richmond
	Cloncurry, part of
	Croydon, part of
	Hughenden, part of
	Julia Creek, part of
	Norman, part of
Burnett	Eidsvold
	Gayndah
	Monto
	Mount Perry
	Wienholt
	Biggenden, part of
	Gin Gin, part of
	Nanango, part of
Cook	Atherton
	Cairns
	Chillagoe
	Coen
	Cook
	Douglas
	Etheridge
	Innisfail
	Mareeba
	Somerset
	Croydon, part of
	Herberton, part of
	Norman, part of
Darling Downs	Allora
	Chinchilla
	Clifton
	Dalby
	Goondiwindi
	Inglewood
	Killarney
	Pittsworth
	Stanthorpe
Darling Downs —*contd.*	Texas
	Warwick
	Condamine, part of
	Crow's Nest, part of
	Oakey, part of
	Toowoomba, part of
Gregory North	Boulia
	Winton
	Cloncurry, part of
	Diamantina, part of
	Julia Creek part of
	Jundah, part of
	Windorah, part of
Gregory South	Adavale, part of
	Diamantina, part of
	Quilpie, part of
	Thargomindah, part of
	Windorah, part of
Leichhardt	Banana
	Emerald
	Springsure
	Taroom
	Clermont, part of
	Condamine, part of
	Mackay, part of
	Mount Morgan, part of
	Rockhampton, part of
	Roma, part of
	St. Lawrence, part of
Maranoa	Bollon
	Mitchell
	St. George
	Surat
	Yeulba
	Charleville, part of
	Cunnamulla, part of
	Roma, part of
Mitchell	Barcaldine
Mitchell —*contd.*	Isisford
	Longreach
	Muttaburra
	Alpha, part of
	Aramac part of
	Blackall, part of
	Hughenden, part of
	Jundah part of
	Tambo, part of
Moreton	Beaudesert
	Brisbane
	Caboolture
	Cleveland
	Dugandan
	Esk
	Gatton
	Goodna
	Harrisville
	Ipswich
	Kilcoy
	Laidley
	Logan
	Lowood
	Marburg
	Redcliffe
	Rosewood
	Southport
	Toogoolawah
	Wynnum
	Crow's Nest, part of
	Maroochy, part of
	Nanango, part of
	Oakey, part of
	Toowoomba, part of
	Woodford part of
North Kennedy	Ayr
	Bowen
	Cardwell
	Charters Towers
	Ingham
North Kennedy —*contd.*	Proserpine
	Ravenswood
	Townsville
	Cape River, part of
	Collinsville, part of
	Herberton. part of
Port Curtis	Gladstone
	Bundaberg, part of
	Mackay, part of
	Mount Morgan, part of
	Rockhampton, part of
	St. Lawrence, part of
South Kennedy	Alpha, part of
	Aramac, part of
	Cape River, part of
	Clermont, part of
	Collinsville, part of
	Mackay, part of
Warrego	Augathella
	Eulo
	Hungerford
	Adavale, part of
	Blackall, part of
	Charleville, part of
	Cunnamulla, part of
	Quilpie, part of
	Tambo, part of
	Thargomindah, part of
Wide Bay	Childers
	Gympie
	Kilkivan
	Maryborough
	Tiaro
	Biggenden, part of
	Bundaberg, part of
	Gin Gin, part of
	Maroochy, part of
	Woodford, part of

EXPLANATION OF GRAPH.—The base of each small square represents an interval of one year, and the vertical height of each square denotes in the case of sheep, 1,000,000; in the case of cattle, 200,000; in the case of horses, 50,000; and in the case of swine, 5,000.

Table No. XXXVI.

RETURN FOR TEN YEARS SHOWING THE DENSITY OF LIVE STOCK IN THE STATE.
(In Converting Horses and Cattle to terms of Sheep, Ten Head of Sheep are taken as Equal to One Horse or Head of Cattle.)

Year.	Horses.			Cattle.			Sheep.			All Kinds in terms of Sheep.		
	Acres per Head.	Number per Square Mile.	Number per Capita Population.	Acres per Head.	Number per Square Mile.	Number per Capita Population.	Acres per Head.	Number per Square Mile.	Number per Capita Population.	Acres per Head.	Number per Square Mile.	Number per Capta Population.
1925...	672	0·95	0·76	67	9·60	7·62	21	30·82	24·46	4·69	136·34	108·19
1926...	751	0·85	0·66	79	8·15	6·34	25	25·15	19·55	5·56	115·18	89·53
1927...	783	0·82	0·63	82	7·79	5·96	26	24·82	18·99	5·77	110·94	84·86
1928...	821	0·78	0·59	84	7·65	5·76	23	27·61	20·77	5·72	111·88	84·19
1929...	858	0·75	0·55	82	7·77	5·77	21	30·31	22·52	5·54	115·45	85·79
1930...	891	0·72	0·53	79	8·15	5·96	19	33·62	24·58	5·23	122·29	89·42
1931...	914	0·70	0·50	77	8·28	5·97	19	33·29	24·01	5·20	123·08	88·74
1932 .	948	0·67	0·48	78	8·26	5·89	20	31·79	22·69	5·29	121·09	86·43
1933...	954	0·67	0·47	74	8·62	6·09	21	29·94	21·15	5·21	122·87	86·79
1934...	957	0·67	0·47	71	9·03	6·31	20	32·18	22·48	4·96	129·14	90·24

Table No. XXXVII.

RETURN SHOWING THE NUMBER OF OWNERS AND THE SIZES OF HERDS OF CATTLE UNDER VARIOUS GROUPINGS IN THE SEVERAL PASTORAL DISTRICTS OF THE STATE AS AT 31ST DECEMBER, 1934.

Pastoral Districts.	1 to 100.		101 to 200.		201 to 300.		301 to 500.		501 to 1,000.	
	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.
Burke	524	12,466	43	6,399	26	6,736	28	11,127	34	26,284
Burnett	4,194	193,088	710	98,357	192	48,173	130	50,377	97	66,679
Cook	1,677	52,695	142	19,551	41	10,299	27	11,116	18	12,589
Darling Downs ..	7,105	260,674	850	119,762	244	59,985	136	51,969	76	52,951
Gregory North ..	184	4,019	10	1,477	7	1,755	10	4,042	10	7,180
Gregory South ..	63	2,052	11	1,572	6	1,486	10	4,221	7	5,567
Leichhardt	2,023	44,472	241	35,356	115	29,006	125	48,537	160	113,779
Maranoa	1,309	39,620	161	23,205	46	11,217	50	18,497	27	20,132
Mitchell	717	17,899	40	5,827	19	4,622	17	6,958	11	7,511
Moreton	10,595	347,527	809	110,671	186	45,216	99	37,731	60	39,915
North Kennedy ..	2,081	43,326	127	17,884	53	13,062	57	22,666	50	35,522
Port Curtis	2,787	102,650	374	53,630	102	25,577	113	43,610	99	69,767
South Kennedy ..	1,020	24,336	86	12,732	33	8,260	37	14,911	60	43,220
Warrego	472	15,362	65	9,190	22	5,420	20	7,938	22	15,531
Wide Bay	5,453	172,759	526	71,543	103	25,449	62	24,658	40	28,227
Totals ..	40,204	1,332,945	4,195	587,156	1,195	296,263	921	358,358	771	544,854

Pastoral Districts.	1,001 to 5,000.		5,001 to 10,000.		10,001 and upwards.		Totals.	
	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.
Burke	39	83,573	22	163,741	16	257,682	732	568,008
Burnett	62	109,354	2	15,376	..	..	5,387	581,404
Cook	50	130,513	9	66,730	10	193,618	1,974	497,111
Darling Downs	34	62,972	..	..	..	..	8,445	608,313
Gregory North	15	34,430	11	81,045	3	49,573	250	183,521
Gregory South	18	42,730	4	34,219	2	20,738	121	112,585
Leichhardt	144	294,957	22	153,604	2	23,254	2,832	742,965
Maranoa	23	45,553	4	29,198	..	..	1,620	187,422
Mitchell	15	28,229	1	5,212	..	..	820	76,258
Moreton	17	24,804	..	..	..	..	11,766	605,864
North Kennedy	77	169,680	12	81,025	7	118,859	2,464	502,024
Port Curtis	83	161,576	6	38,427	2	22,222	3,566	517,459
South Kennedy	51	116,895	13	95,810	4	62,499	1,304	378,663
Warrego	16	30,109	4	26,449	1	13,382	622	123,381
Wide Bay	22	39,950	1	5,077	..	..	6,207	367,663
Totals..	666	1,375,325	111	795,913	47	761,827	48,110	6,052,641

Table No. XXXVIII.

RETURN SHOWING THE NUMBER OF OWNERS AND THE SIZES OF HERDS OF CATTLE UNDER VARIOUS GROUPINGS IN THE SOUTHERN, CENTRAL, AND NORTHERN DIVISIONS OF THE STATE AS AT 31ST DECEMBER, 1934.

Division.	1–100.		101–200.		201–300.		301–500.		501–1,000.		1,001–5,000.		5,001–10,000.		10,001 and Upwards.		Totals.	
	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.	Owners.	Cattle.
Southern ..	29,494	1,042,773	3,227	448,577	848	209,242	546	210,062	367	254,346	216	404,948	18	132,637	4	46,725	34,720	2,749,310
Central	5,538	160,355	593	85,672	210	52,518	240	94,106	271	193,203	263	541,383	43	298,922	7	94,985	7,165	1,521,144
Northern ..	5,172	129,817	375	52,907	137	34,503	135	54,190	133	97,305	187	428,994	50	364,354	36	620,117	6,225	1,782,187
Totals ..	40,204	1,332,945	4,195	587,156	1,195	296,263	921	358,358	771	544,854	666	1,375,325	111	795,913	47	761,827	48,110	6,052,641

Table No. XXXIX.

RETURN SHOWING THE NUMBER OF OWNERS AND THE SIZES OF FLOCKS OF SHEEP UNDER VARIOUS GROUPINGS IN THE SEVERAL PASTORAL DISTRICTS OF THE STATE AS AT 31ST DECEMBER, 1934.

Pastoral Districts.	1 TO 500.		501 TO 1,000.		1,001 TO 2,000.		2,001 TO 5,000.		5,001 TO 10,000.		10,001 TO 20,000.		20,001 TO 50,000.		50,001 TO 100,000.		100,001 AND UPWARDS.		TOTALS.	
	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.
Burke	35	4,478	8	6,744	20	33,292	156	572,364	109	784,961	46	642,457	16	482,308	1	68,888	..	..	391	2,595,492
Burnett	83	3,798	1	600	..	..	..	..	..	..	..	..	..	..	..	..	..	..	84	4,398
Cook	9	302	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	302
Darling Downs	671	114,187	289	215,265	292	426,961	273	896,844	62	422,381	24	310,136	8	234,204	..	..	..	..	1,619	2,619,978
Gregory North	16	2,502	2	1,600	14	22,030	58	213,646	58	365,821	19	264,814	16	496,589	5	305,907	..	..	188	1,672,909
Gregory South	2	392	2	1,421	9	15,416	16	53,895	14	96,919	8	111,646	3	72,984	2	132,141	..	..	56	484,814
Leichhardt	101	11,336	56	41,908	73	112,703	88	287,464	31	203,945	9	136,810	7	226,876	1	56,320	..	..	366	1,077,362
Maranoa	136	28,816	103	80,009	196	292,772	323	1,076,684	141	985,122	46	606,977	24	683,381	1	65,210	..	..	970	3,818,971
Mitchell	50	7,054	30	23,508	50	81,001	239	870,612	224	1,564,075	90	1,244,948	36	1,057,432	10	641,899	1	120,555	730	5,611,084
Moreton	224	6,155	..	..	1	1,674	..	..	..	..	..	..	..	..	..	..	..	..	225	7,829
North Kennedy	34	4,107	2	1,479	..	..	..	..	..	..	..	..	..	..	..	..	..	..	36	5,586
Port Curtis	85	5,295	3	2,110	1	1,800	3	7,104	1	9,100	..	..	..	..	..	..	..	..	93	25,409
South Kennedy	18	1,741	9	6,991	8	13,219	14	49,263	10	65,369	3	42,870	..	..	1	77,793	..	..	63	257,246
Warrego	22	2,689	13	9,985	33	53,184	201	686,491	120	845,472	57	767,601	16	488,493	8	534,838	..	..	470	3,388,753
Wide Bay	101	2,594	..	..	1	1,455	..	..	..	..	..	..	..	..	..	..	..	..	102	4,049
Totals	1,587	195,446	518	391,620	698	1,055,507	1,371	4,714,367	770	5,343,165	302	4,128,259	126	3,742,267	29	1,882,996	1	120,555	5,402	21,574,182

Table No. XL.

RETURN SHOWING THE NUMBER OF OWNERS AND THE SIZES OF FLOCKS OF SHEEP UNDER VARIOUS GROUPINGS IN THE SOUTHERN, CENTRAL, AND NORTHERN DIVISIONS OF THE STATE AS AT 31ST DECEMBER, 1934.

Division.	1–500.		501–1,000.		1,001–2,000.		2,001–5,000.		5,001–10,000.		10,001–20,000.		20,001–50,000.		50,001–100,000.		100,001 and Upwards.		Totals.	
	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.	Owners.	Sheep.
Southern ..	1,275	162,808	424	318,892	544	808,467	822	2,742,166	340	2,367,246	135	1,796,360	51	1,479,062	11	732,189	..	..	3,602	10,407,190
Central	222	22,951	82	63,288	131	309,632	386	1,376,805	318	2,167,195	118	1,642,082	59	1,780,897	17	1,081,919	1	120,555	1,334	8,465,324
Northern ..	90	9,687	12	9,440	23	37,408	163	595,396	112	808,724	49	689,817	16	482,308	1	68,888	..	..	466	2,701,668
Totals ..	1,587	195,446	518	391,620	698	1,055,507	1,371	4,714,367	770	5,343,165	302	4,128,259	126	3,742,267	29	1,882,996	1	120,555	5,402	21,574,182

Table No. XLI.

RETURN FOR TEN YEARS SHOWING THE NUMBER OF HORSES, CATTLE, SHEEP, AND SWINE, IN THE SOUTHERN, CENTRAL, AND NORTHERN DIVISIONS OF THE STATE.

Year ended 31st Dec.	Southern.				Central.				Northern.			
	Horses.	Cattle.	Sheep.	Swine.	Horses.	Cattle.	Sheep.	Swine.	Horses.	Cattle.	Sheep.	Swine.
1925	281,290	2,580,216	7,930,357	173,948	153,725	1,777,503	9,757,837	10,651	203,357	2,078,926	2,975,129	14,999
1926	268,496	2,327,553	8,620,821	158,517	125,561	1,292,426	6,187,335	9,658	177,565	1,844,866	2,052,616	15,487
1927	258,952	2,322,633	8,118,128	166,178	114,805	1,149,911	5,928,454	10,155	174,576	1,753,260	2,595,803	15,614
1928	253,377	2,299,516	9,224,903	187,582	109,510	1,115,865	6,886,846	10,852	159,603	1,712,960	2,397,452	17,330
1929	244,604	2,332,195	9,520,339	204,291	104,807	1,184,999	7,943,392	11,571	150,693	1,691,394	2,860,572	20,175
1930	235,769	2,408,854	9,957,562	189,248	101,806	1,290,133	9,353,534	9,270	144,040	1,764,737	3,230,947	19,010
1931	233,390	2,524,266	10,160,434	199,717	103,419	1,310,131	9,072,850	8,095	132,665	1,716,002	3,090,994	14,874
1932	225,662	2,536,342	10,274,672	193,652	100,097	1,319,371	8,753,213	7,177	126,727	1,679,352	2,284,980	12,420
1933	223,465	2,610,345	9,504,715	195,853	99,099	1,406,193	7,787,203	7,843	127,460	1,764,632	2,780,886	13,752
1934	225,244	2,749,310	10,407,190	244,848	98,953	1,521,144	8,465,324	9,453	124,407	1,782,187	2,701,668	15,572

Table No. XLII.

RETURN FOR TEN YEARS SHOWING THE NUMBER OF CATTLE, SHEEP, ETC., SLAUGHTERED AT FACTORIES, SLAUGHTER-HOUSES, AND ON HOLDINGS FOR CONSUMPTION AS FOOD IN THE STATE, TOGETHER WITH THE AVERAGE DRESSED WEIGHT OF EACH ANIMAL AND THE ESTIMATED QUANTITY CONSUMED PER CAPITA.

Year.	Mean Population for the Year. ¶	* Number Slaughtered.					Average Dressed Weight.					‡ Consumption per Capita.					
		Cattle.	Sheep.	Calves.	Lambs.	Swine.	Cattle.	Sheep.	Calves.	Lambs.	Swine.	Beef.	Mutton.	Veal.	Lamb.	Pork.	Total.
							lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
1925	836,920	333,095	580,566	49,691	19,969	66,398	543	42	50	30	82	216·11	29·14	2·97	0·72	6·51	255·45
1926	857,170	321,795	656,458	51,170	19,866	72,145	550	44	79	31	83	206·48	33·70	4·72	0·72	6·99	252·61
1927	870,762	316,661	641,636	43,122	24,329	68,580	572	42	83	30	83	208·01	30·95	4·11	0·84	6·54	250·45
1928	884,958	307,791	725,375	45,793	19,570	73,917	540	42	76	30	83	187·81	34·43	3·93	0·66	6·93	233·76
1929	897,734	287,023	858,563	43,527	26,403	83,526	539	43	47	31	89	172·33	41·12	2·28	0·91	8·28	224·92
1930	910,510	260,522	1,110,997	46,286	31,058	79,407	525	41	52	30	87	150·45	50·42	2·65	1·03	7·60	212·15
1931	925,039	255,213	1,210,090	47,662	38,509	96,616	532	42	52	30	84	146·65	54·68	2·70	1·25	8·82	214·10
1932	935,809	271,809	1,186,476	54,598	62,542	95,631	522	42	60	30	84	151·49	53·57	3·53	1·98	8·59	219·16
1933	945,706	§302,669	§1,170,363	§76,086	§55,193	§342,357	531	41	61	28	103	169·79	50·76	4·92	1·64	37·27	264·38
1934	955,839	324,262	983,326	67,222	40,176	363,022	528	41	63	29	102	179·16	42·43	4·46	1·23	38·64	265·92

* Includes slaughterings on Farms and Stations, of which, in 1934, there were 32,519 Cattle, 261,198 Sheep, and 6,080 Swine.

‡ Figures revised on adjusted census populations. The figures from 1930 onwards are calculated on actual production, previous to this they were calculated on averages shown herein.

§ Includes, for the first time, animals slaughtered at abattoir for meatworks.

¶ Adjusted census populations.

Table No. XLIII.

RETURN FOR TEN YEARS OF LIVE STOCK SLAUGHTERED AT MEATWORKS AND BACON FACTORIES IN THE STATE FOR PRESERVATION AS FOOD, FOR FREEZING, OR FOR TALLOW, WITH THE QUANTITY AND VALUE OF MEAT, TALLOW, LARD, ETC., PRODUCED.

Year.	Number of Establishments.	Average Number of Hands Employed.	Number Slaughtered.								Meat Produced.										Extract and Essence of Meat Produced.	Quantity of Tallow Produced.	Quantity of Lard Produced.	Total Value of all Products shown here.
			Cattle.			Sheep.			Lambs.	Swine.	Beef.			Mutton.			Lamb.		Bacon and Ham. *	Pork. *				
			For Freezing, Local Consumption, &c.	For Preserving.	For Boiling Down.	For Freezing, Local Consumption, &c.	For Preserving.	For Boiling Down.			Frozen and Local Consumption.	Preserved.	Salted.	Frozen and Local Consumption	Preserved.	Salted.	Frozen and Local Consumption.	Preserved.						
											Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Tons.	Lb.	£
1924–25	19	4,371	539,135	25,144	4,044	452	78	.	...	206,454	295,294,239	23,042,674	77,600	17,082	7,877	...	...	...	15,334,549	63,553	182,503	10,931	766,360	4,921,665
1925–26	19	4,211	363,011	29,480	2,513	34,702	35	...	63	243,505	201,983,990	15,570,166	32,800	1,265,319	1,451	...	2,205	...	18,013,086	913,026	141,283	7,767	895,925	4,107,662
1926–27	20	3,564	179,694	14,043	938	2,942	...	...	...	208,016	100,744,934	9,859,202	27,662	121,956	. .	...	...	...	17,986,523	649,078	77,764	5,302	839,959	3,847,224
1927–28	19	3,813	364,860	14,919	433	3,777	...	...	.	241,871	215,856,923	9,053,287	70,263	161,757	...	...	...	...	17,986,523	649,078	77,764	5,302	839,959	3,847,224
1928–29	18	3,872	316,077	14,322	1,213	58,936	...	64	1,516	307,371	194,444,901	9,293,369	345,125	2,623,254	...	1,688	46,859	...	21,710,900	1,289,112	84,283	6,455	1,112,954	4,179,275
1929–30	17	3,454	287,239	14,803	1,162	179,550	7,060	133	18,269	283,065	174,004,557	7,752,595	25,897	7,558,955	262,169	...	535,898	...	18,924,040	2,235,411	78,843	3,682	989,890	4,003,892
1930–31	17	3,225	328,790	11,676	1,199	436,463	828	465	41,434	328,649	190,829,633	5,810,442	380,549	20,746,284	29,695	18,687	1,289,983	...	19,842,633	7,274,913	65,894	4,158	993,936	3,838,161
1931–32	16	2,747	227,204	9,051	1,519	466,292	7,922	4,588	34,573	311,599	132,573,771	3,654,234	3,000	20,563,645	299,958	...	1,110,969	...	19,639,692	5,161,284	81,743	3,457	1,083,818	2,438,287
1932–33	16	2,684	371,114	10,625	1,465	707,088	4,040	325	121,616	316,727	188,728,987	4,303,516	13,404	29,366,445	102,658	...	3,636,277	...	16,701,874	7,027,620	31,459	2,444	893,216	3,162,820
1933–34	17	2,767	489,548	2,482	3,125	639,843	500	667	56,714	343,727	239,961,131	998,773	21,449	21,720,273	13,089	...	1,507,122	...	18,573,812	8,795,106	40,744	4,638	1,174,738	3,368,359

* Not including farmers' bacon and pork. N.B.—8,477 swine killed by farmers and 634,733 lb. of pork, valued at £14,175, and 307,455 lb. and bacon and ham, valued at £11,952, made therefrom during 1933 are not included in this table.

Table No. XLIV.

RETURN FOR TEN YEARS SHOWING THE QUANTITY AND VALUE OF OTHER PRODUCTS OF MEATWORKS AND BACON FACTORIES IN THE STATE.

Year.	No.	Hides.		Skins.		Edible Fats.		Bones.		Hoofs and Horns.	Hair.		Oils, &c.		Manure.		All Other Products.	Total Value.
		Number.	£	Number.	£	Lb.	£	Tons.	£	£	Lb.	£	Gallons.	£	Tons.	£	£	£
1924–25	19	568,134	678,377	559	337	14,465,038	280,525	845	12,801	27,956	188,801	16,452	45,700	10,363	9,191	80,224	536,070	1,643,105
1925–26	19	394,110	471,505	34,800	26,081	10,753,803	213,596	570	5,867	20,144	173,899	5,218	34,134	7,633	5,970	50,198	453,734	1,253,976
1926–27	20	194,641	260,470	2,942	1,189	5,926,129	113,821	223	2,122	7,929	129,149	2,927	14,797	3,424	4,761	43,963	424,203	860,048
1927–28	19	369,927	718,253	4,048	1,849	9,070,227	197,418	348	3,379	9,397	159,603	4,602	19,899	4,735	5,626	54,959	579,453	1,574,045
1928–29	18	329,162	463,693	63,146	22,857	10,574,003	231,239	306	3,324	11,211	101,132	4,033	18,584	5,242	4,831	49,046	552,685	1,343,330
1929–30	17	298,455	298,953	209,757	35,619	10,862,045	203,281	194	2,156	8,466	56,523	2,395	13,832	3,142	4,066	45,096	488,046	1,087,154
1930–31	17	338,653	325,688	532,484	73,520	13,031,746	182,898	316	3,541	10,239	46,460	2,773	18,125	3,817	4,935	48,653	411,852	1,062,991
1931–32	16	233,985	189,009	456,858	87,305	8,771,038	99,432	159	1,834	4,546	23,170	1,172	11,902	2,363	3,616	29,821	365,949	781,431
1932–33	16	329,482	286,139	881,262	165,083	11,436,961	118,513	143	1,470	7,238	30,340	1,394	13,487	2,618	3,634	29,764	256,405	868,624
1933–34	17	324,729	314,594	373,831	93,275	15,908,027	175,014	324	3,388	9,512	44,383	2,085	24,013	4,840	5,742	45,945	388,639	1,037,192

NOTE.—The Total Value of Production of the Cattle Industry for 1933-34 has been estimated at, approximately, £4,652,806.

Table No. XLV.

RETURN SHOWING THE PURE BREEDS OF CATTLE AS RETURNED IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE FOR THE YEAR ENDED 31ST DECEMBER, 1934.

Petty Sessions District.	Aberdeen Angus.	Ayrshire.	Devon.	Friesian.	Guernsey.	Hereford.	Jersey.	Milking Shorthorn and Aust. Illawarra Shorthorn.	Red Polled.	Shorthorn.	Crossed and Unspecified.	Total.
Adavale	..	..	..	..	..	..	..	..	2,485	2,899	5,384
Allora	..	..	..	..	88	16	11	..	55	15,391	15,561
Alpha	2	..	..	..	150	4	..	..	15,149	42,262	57,567
Aramac	95	..	..	..	313	9	37	..	304	3,211	3,969
Atherton	..	..	..	62	17	..	1,391	4,908	..	619	41,612	48,609
Augathella	..	..	..	45	..	839	..	..	..	900	27,038	28,822
Ayr	..	39	..	..	..	..	57	619	311	12,405	22,996	36,427
Banana	..	..	..	83	..	19,130	59	429	..	152	40,614	60,467
Barcaldine	..	..	..	..	..	..	10	19	201	405	3,061	3,696
Beaudesert	33	57	..	145	6	551	864	1,452	..	186	77,001	80,295
Biggenden	..	2	..	6	57	*5	927	1,352	..	90	45,992	48,431
Blackall	11	..	..	..	..	..	89	20	..	1,970	3,662	5,752
Bollon	..	..	..	..	..	59	45	..	..	1,301	7,518	8,923
Boulia	..	..	..	..	..	..	..	..	..	22,815	18,406	41,221
Bowen	6	14	4	..	..	1	7	46	17	630	27,500	28,225
Brisbane	..	73	..	28	..	..	777	203	..	34	21,088	22,203
Bundaberg	1	89	..	9	2	1,689	601	571	..	176	58,086	61,224
Burke	14	..	..	..	..	..	..	..	..	50	81,045	81,109
Caboolture	..	..	..	..	..	..	146	36	..	51	9,119	9,352
Cairns	..	5	..	..	..	..	141	83	..	19	4,229	4,477
Camooweal	..	..	..	..	..	..	..	..	..	28,946	35,238	64,184
Cape River	20	..	6	..	..	1,789	74	..	..	10,858	75,768	88,515
Cardwell	..	..	..	..	..	..	4	128	22	..	6,355	6,509
Charleville	7	..	..	35	..	75	113	56	17	1,593	24,527	26,423
Charters Towers	15	..	302	..	..	..	309	82	..	25,642	141,694	168,044
Childers	..	..	..	..	..	84	187	126	..	..	14,386	14,783
Chillagoe	..	..	..	..	..	..	..	..	..	..	30,120	30,120
Chinchilla	78	..	..	15	..	†1,597	110	2,011	20	1,558	61,497	66,886
Clermont	182	..	..	..	..	..	95	4	6	‡64,601	83,289	148,177
Cleveland	..	..	..	..	..	..	6	2	..	..	1,489	1,497
Clifton	..	..	..	18	1	26	67	326	..	56	19,087	19,581
Cloncurry	..	..	..	..	3	6	10	..	20	83,572	121,063	204,674
Coen	..	..	..	..	..	..	..	..	..	..	26,250	26,250
Collinsville	..	1	..	..	..	20	..	..	38	15,742	133,596	149,397
Condamine	4	4	..	2	..	1,667	180	357	12	956	66,514	69,696
Cook	12	..	7	..	..	..	..	..	..	9,196	74,273	83,488
Crow's Nest	..	2	..	..	66	11	500	252	1	4	27,744	28,580
Croydon	..	..	..	..	..	..	..	..	..	..	22,109	22,109
Cunnamulla	260	..	..	..	..	583	42	..	..	8,536	7,521	16,942
Dalby	76	159	..	173	1	4,498	596	823	233	4,281	128,350	139,190
Diamantina	..	..	..	..	..	..	..	..	..	6,411	35,054	41,465
Douglas	..	..	..	..	..	..	1	3	..	..	3,809	3,813
Dugandan	..	..	..	105	..	190	418	752	..	195	42,376	44,036
Eidsvold	40	1	..	6	..	13,095	143	426	1	88	41,285	55,085
Emerald	..	..	..	..	..	3,730	38	37	..	1,797	46,513	52,115
Esk	..	..	..	..	..	891	30	238	..	596	30,406	32,161
th eridge	..	..	6	..	..	4,000	..	..	..	92	179,471	183,569

Table No. XLV.—*continued.*

RETURN SHOWING THE PURE BREEDS OF CATTLE AS RETURNED IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE FOR THE YEAR ENDED 31ST DECEMBER, 1934—*continued.*

Petty Sessions District.	Aberdeen Angus.	Ayrshire.	Devon.	Friesian.	Guernsey.	Hereford.	Jersey.	Milking Shorthorn and Aust. Illawarra Shorthorn.	Red Polled.	Shorthorn.	Crossed and Unspecified.	Total.
Eulo	..	..	..	..	..	..	6	..	..	1,208	6,348	7,562
Gatton	1	9	..	8	..	594	309	281	..	44	27,539	28,785
Gayndah	108	50	..	14	3	10,135	914	3,124	130	1,368	123,509	139,355
Gin Gin	2	2	..	15	..	§6,487	156	177	..	..	49,960	56,739
Gladstone	630	22	..	220	..	‖23,120	852	3,030	48	3,747	118,765	150,434
Goodna	..	..	..	..	..	..	117	22	..	..	2,464	2,603
Goondiwindi	163	2	..	..	..	5,381	78	109	..	6,073	39,163	50,968
Gympie	..	359	..	119	43	701	2,985	4,639	..	1,663	120,626	131,135
Harrisville	..	..	..	..	..	1	200	853	..	3	21,725	22,782
Herberton	2	..	164	..	1	..	224	124	..	2,768	66,844	70,127
Hughenden	68	10	..	..	..	8,591	206	..	2,589	6,870	36,265	54,599
Hungerford	..	..	..	..	..	..	..	..	..	3,130	3,255	6,385
Ingham	..	..	..	3	..	..	5	26	..	..	36,948	36,982
Inglewood	110	..	..	3	1	1,149	38	508	1	2,794	21,172	25,776
Innisfail	..	1	..	..	..	..	34	31	..	26	4,508	4,600
Ipswich	..	1	..	15	..	..	699	266	..	..	15,740	16,721
Isisford	..	..	..	..	..	..	46	..	..	337	5,476	5,859
Julia Creek	2	..	..	..	..	..	6	..	157	1,544	56,336	58,045
Jundah	..	..	..	..	..	..	..	..	..	11,974	9,182	21,156
Kilcoy	1	..	..	20	..	..	71	375	..	..	19,188	19,655
Kilkivan	..	4	4	..	..	512	329	683	..	201	20,579	22,312
Killarney	..	..	647	..	..	10	252	418	..	1	11,803	13,131
Laidley	..	..	..	1	..	..	390	493	..	..	18,022	18,906
Logan	..	129	..	3	..	..	201	116	..	..	16,430	16,879
Longreach	199	..	..	..	..	..	93	13	8	5,151	8,689	14,153
Lowood	..	..	..	..	..	952	23	195	..	..	16,308	17,478
Mackay	317	1	..	14	..	1,446	608	932	..	6,535	136,489	146,342
Marburg	..	..	..	17	..	..	137	299	..	..	8,404	8,857
Mareeba	..	..	..	20	..	..	99	335	..	116	18,223	18,793
Maroochy	..	95	..	4	139	2	2,053	2,590	..	271	39,076	44,230
Maryborough	..	306	..	10	..	510	399	306	1	2	25,339	26,873
Mitchell	..	..	..	29	..	2,102	13	11	..	909	78,070	81,134
Monto	12	..	..	20	..	¶4,557	406	2,201	33	124	52,885	60,238
Mount Isa	..	..	..	..	..	..	..	..	..	..	1,042	1,042
Mount Morgan	..	10	..	20	..	**6,733	660	467	1,234	652	89,147	98,923
Mount Perry	..	..	..	..	..	104	1	4	..	..	35,485	35,594
Muttaburra	49	..	..	60	..	..	31	29	..	4,161	5,222	9,552
Nanango	647	75	..	166	51	3,755	1,417	4,043	270	3,518	108,779	122,721
Norman	..	..	..	..	..	..	..	..	..	31,870	145,653	177,523
Oakey	352	278	..	276	30	††1,099	1,219	943	81	738	81,831	86,847

Table No. XLV.—*continued.*

RETURN SHOWING THE PURE BREEDS OF CATTLE AS RETURNED IN THE SEVERAL PETTY SESSIONS DISTRICTS OF THE STATE FOR THE YEAR ENDED 31ST DECEMBER, 1934—*continued.*

Petty Sessions District.	Aberdeen Angus.	Ayrshire.	Devon.	Friesian.	Guernsey.	Hereford.	Jersey.	Milking Shorthorn and Aust. Illawarra Shorthorn.	Red Polled.	Shorthorn.	Crossed and Unspecified.	Total.
Pittsworth	..	317	..	96	..	220	80	653	20	611	44,347	46,344
Proserpine	40	5	..	1	..	477	71	19	..	30	13,580	14,223
Quilpie	..	..	..	..	..	..	..	..	..	8,364	23,361	31,725
Ravenswood	..	..	..	..	..	..	1	..	..	..	16,462	16,463
Redcliffe	..	108	..	4	6	..	79	167	..	1	18,837	19,202
Richmond	67	..	..	..	..	8,366	173	76	455	13,252	26,008	48,397
Rockhampton	300	252	2,300	72	..	‡‡42,818	1,144	1,040	502	4,105	321,968	374,501
Roma	225	1	..	..	..	§§2,160	261	615	1	14,650	59,417	77,330
Rosewood	20	..	..	..	..	..	247	68	4	..	24,174	24,513
St. George	39	..	..	..	..	3	74	10	..	7,556	15,941	23,623
St. Lawrence	476	..	..	..	..	‖‖12,433	..	..	30	7,158	108,881	128,978
Somerset	..	..	..	..	..	..	..	1	..	..	1,079	1,080
Southport	..	9	..	35	61	..	498	1,568	..	219	36,750	39,140
Springsure	..	..	..	..	..	1,670	15	..	1	8,188	83,346	93,220
Stanthorpe	789	..	1	..	..	165	118	1	14	385	9,308	10,781
Surat	..	..	..	..	..	52	24	..	..	2,750	10,842	13,668
Tambo	..	..	..	..	..	102	..	..	..	14,904	8,160	23,166
Taroom	..	..	7	..	..	21,818	..	1	..	17,014	72,408	111,248
Texas	2	..	..	..	1	1	226	214	1	281	10,757	11,483
Thargomindah	..	..	..	..	..	3	..	..	..	4,642	46,027	50,672
Tiaro	50	50	..	..	..	1,598	615	1,711	151	201	50,879	55,255
Toogoolawah	2,065	..	..	402	..	¶¶1,530	283	1,254	..	2,367	48,867	56,768
Toowoomba	..	78	..	237	27	..	964	1,567	15	507	42,639	46,034
Townsville	4	4	..	38	..	..	61	321	92	1,018	27,659	29,197
Warwick	656	6	..	..	..	440	426	901	354	***850	48,279	51,912
Wienholt	550	65	..	271	..	14,842	1,348	2,956	589	426	125,015	146,062
Windorah	..	..	..	..	..	..	..	..	..	8,519	46,087	54,606
Winton	1	..	..	..	..	..	74	..	..	23,883	21,207	45,165
Woodford	139	12	..	2	92	2	534	511	2	1	24,517	25,812
Wynnum	..	6	..	1	..	..	55	..	..	..	1,933	1,995
Yeulba	..	..	..	..	..	1,194	1	..	..	36	8,048	9,279
Totals	8,942	2,713	3,448	2,948	608	†††242,922	30,715	56,646	7,682	‡‡‡564,232	5,131,785	6,052,641

* Including 3 Polled Hereford.
† Including 4 Polled Hereford.
‡ Including 10 Polled Durham.
§ Including 80 Polled Hereford.
‖ Including 214 Polled Hereford.
¶ Including 40 Polled Hereford.
** Including 2 Polled Hereford.
†† Including 10 Polled Hereford.
‡‡ Including 420 Polled Hereford and 7 Zebu.
§§ Including 323 Polled Hereford.
‖‖ Including 1 Polled Hereford.
¶¶ Including 1 Polled Hereford.
*** Including 2 Polled Durham.
††† Including 1,098 Polled Hereford and 7 Zebu.
‡‡‡ Including 12 Polled Durham.

Table No. XLVI.

RETURN SHOWING DETAILS OF SHEEP SHORN AND WOOL PRODUCED IN THE SEVERAL PASTORAL DISTRICTS OF QUEENSLAND DURING THE TWELVE MONTHS ENDED 30TH JUNE, 1934.

Pastoral District.	Classification of Sheep Shorn.						Result of Clip.				All Wool Expressed as Greasy.*
	Ewes.	Wethers.	Weaners and Hoggets.	Lambs.	Rams.	Total.	Greasy Wool.		Scoured Wool.		
							Bales.	Lb.	Bales.	Lb.	Lb.
Burke	1,469,519	804,343	225,884	250,208	38,949	2,788,903	44,666	14,731,103	13,835	2,841,397	20,887,463
Burnett	1,944	290	281	228	31	2,774	55	16,375	..	..	16,375
Cook	143	326	12	10	3	494	10	2,774	..	..	2,774
Darling Downs	929,142	1,186,248	238,535	147,203	17,326	2,518,454	59,208	18,152,693	12	1,923	18,156,860
Gregory North	933,012	437,252	167,039	180,698	24,222	1,742,223	24,805	8,467,808	13,733	2,801,568	14,537,872
Gregory South	262,996	74,853	41,781	34,925	7,982	422,537	9,300	3,037,561	770	157,375	3,378,540
Leichhardt	376,713	431,907	50,808	89,320	9,078	957,826	19,951	6,500,529	134	31,573	6,568,937
Maranoa	1,733,532	1,022,305	361,664	204,828	32,867	3,355,196	78,026	24,937,649	1,294	278,177	25,540,366
Mitchell	3,054,089	1,453,914	512,201	366,877	83,966	5,471,047	104,599	35,700,289	17,414	3,886,271	44,120,543
Moreton	2,359	2,480	289	214	63	5,405	95	28,421	..	..	28,421
North Kennedy	1,553	686	224	189	43	2,695	50	13,923	6	1,059	16,217
Port Curtis	10,835	6,408	3,421	1,426	297	22,387	435	125,344	..	..	125,344
South Kennedy	77,996	99,703	2,283	26,457	2,092	208,531	4,418	1,505,129	64	13,392	1,534,145
Warrego	1,784,681	853,378	357,433	234,867	44,062	3,274,421	72,509	24,086,355	4,176	855,612	25,940,181
Wide Bay	1,396	1,865	59	87	20	3,427	68	20,127	..	..	20,127
Totals	10,639,910	6,375,958	1,961,914	1,537,537	261,001	20,776,320	418,195	137,326,080	51,438	10,868,347	160,874,165
Quantity of wool returned as greasy by growers but subsequently scoured							− 38,056	−12,496,876	+ 27,298	+ 5,767,789	
Total remaining greasy							380,139	124,829,204			
Total scoured							..	..	78,736	16,636,136	
Quantity of wool fellmongered							..	..	12,898	2,725,297	5,904,810
Grand total scoured and fellmongered							..	..	91,634	19,361,433	
Estimated quantity of wool on skins other than fellmongered							..	..	..	..	2,971,720
Quantity of dead wool returned by owners excluded from clip							..	..	..	..	238,821
Grand total all wool produced expressed as greasy							..	..	..	..	169,989,516
Estimated value of total wool produced							..	..	†£10,227,703		

* Scoured wool has been converted into its greasy equivalent on the basis of 2½ lb. greasy being required to produce 1 lb. scoured wool

† Based on average price realised at Brisbane wool sales for the 1933–34 clip.

Table No. XLVII.

RETURN SHOWING THE AVERAGE WEIGHT PER FLEECE IN THE PASTORAL DISTRICTS OF QUEENSLAND FOR TEN YEARS.

Pastoral District.	Average Weight of Clip per Sheep in Greasy Wool.										
	1924-25.	1925-6.	1926-7.	1927-8.	1928-9.	1929-30.	1930-1.	1931-2.	1932-3.	1933-4	Increase or Decrease 1934 on 1933.
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
Burke	6·81	6·44	5·48	6·76	6·56	6·99	6·84	7·19	7·27	7·49	0·22
Burnett	5·19	5·76	6·07	5·04	5·32	5·62	6·10	5·88	6·56	5·90	— 0·66
Cook	3·68	6·72	4·15	4·76	4·21	5·01	5·84	5·22	6·24	5·62	— 0·62
Darling Downs ..	7·52	7·18	7·08	7·39	7·41	7·26	7·58	7·59	7·19	7·21	0·02
Gregory North ..	6·95	6·73	5·72	7·05	6·60	7·91	7·82	7·70	8·39	8·34	— 0·05
Gregory South ..	7·76	7·39	7·83	7·07	7·60	7·79	8·27	7·97	7·94	8·00	0·06
Leichhardt	6·87	6·38	5·39	6·65	6·51	6·64	6·69	6·27	7·09	6·86	— 0·23
Maranoa	7·63	7·08	7·96	7·57	7·63	7·89	7·75	7·94	7·68	7·61	— 0·07
Mitchell	7·52	7·11	5·88	7·38	7·59	7·79	8·04	7·38	7·92	8·06	0·14
Moreton	6·91	5·97	6·55	5·88	6·42	6·72	6·25	6·90	6·67	5·26	— 1·41
North Kennedy ..	4·24	5·37	5·88	6·15	5·60	5·63	4·54	5·66	6·44	6·02	— 0·42
Port Curtis	5·35	6·31	5·63	5·16	5·25	5·14	5·20	6·20	5·95	5·60	— 0·35
South Kennedy ..	6·64	6·02	5·77	7·20	6·69	6·66	6·59	6·04	7·43	7·36	— 0·07
Warrego	7·99	7·46	7·51	7·32	7·63	7·63	8·08	8·38	8·07	7·92	— 0·15
Wide Bay	5·77	4·50	5·28	5·13	5·32	6·23	5·54	5·74	7·03	5·87	— 1·16
State	7·41	6·99	6·60	7·24	7·31	7·52	7·67	7·60	7·75	7·74	— 0·01

Table No. XLVIII.

RETURN SHOWING SKINS AND DEAD WOOL OBTAINED ON SHEEP HOLDINGS, VALUE OF MACHINERY THEREON, AND AVERAGE WEIGHT OF GREASY AND SCOURED BALES IN THE VARIOUS PASTORAL DISTRICTS OF QUEENSLAND DURING THE TWELVE MONTHS ENDED 30TH JUNE, 1934.

Pastoral District.	Skins and Dead Wool Sold or Utilised by Wool Growers.		Machinery on Sheep Holdings.	Average Weight per Bale of Wool Clip.	
	Sheep Skins.	Dead Wool.	Value.	Greasy.	Scoured.
	No.	Lb.	£	Lb.	Lb.
Burke	12,290	9,623	292,548	330	205
Burnett	92	..	236	298	..
Cook	..	..	128	277	..
Darling Downs	32,696	50,543	405,801	307	160
Gregory North	13,102	21,573	390,840	341	204
Gregory South	3,761	20,682	72,569	327	204
Leichhardt	6,552	6,371	196,941	326	236
Maranoa	33,708	32,896	347,794	320	215
Mitchell	45,550	49,369	766,493	341	223
Moreton	423	260	1,272	299	..
North Kennedy	22	..	306	278	176
Port Curtis	306	..	5,183	288	..
South Kennedy	1,051	..	57,651	341	209
Warrego	33,082	47,454	301,938	332	205
Wide Bay	221	50	109	296	..
Totals	182,856	238,821	2,839,809	328	211

Table No. XLIX.

RETURN SHOWING THE TOTAL NUMBER OF SHEEP SHORN AND THE RESULT OF THE CLIP IN EACH OF THE THREE FINANCIAL DIVISIONS OF THE STATE FOR THE TWELVE MONTHS ENDED 30TH JUNE, 1934.

Division.	Total Number of Sheep Shorn.	Result of the Clip.				Total Clip.		Average per Fleece in Grease.
		Greasy.		Scoured.		Expressed as Greasy.	Per Centage to Total.	
		Bales.	Lb.	Bales.	Lb.	Lb.		Lb.
Southern	9,661,464	220,973	70,763,095	6,275	1,297,771	73,574,933	45·73	7·62
Central	8,223,270	150,368	51,111,280	31,293	6,722,518	65,676,735	40·83	7·99
Northern	2,891,586	46,854	15,451,705	13,870	2,848,058	21,622,497	13·44	7·48
Totals ..	20,776,320	418,195	137,326,080	51,438	10,868,347	160,874,165	100·00	7·74

Table No. L.

RETURN FOR NINE YEARS SHOWING THE PROPORTION OF THE CLIP IN EACH OF THE THREE FINANCIAL DIVISIONS TO THE TOTAL CLIP OF THE STATE.

Financial Division.	1925-6.	1926-7.	1927-8.	1928-9.	1929-30.	1930-1.	1931-2.	1932-3.	1933-4.
	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per Cent.
Southern	39·20	55·20	50·08	50·60	46·89	44·71	47·04	46·56	45·73
Central	47·72	33·58	36·47	37·23	40·28	42·37	38·87	42·60	40·83
Northern	13·08	11·22	13·45	12·17	12·83	12·92	14·09	10·84	13·44

Table No. LI.

RETURN SHOWING THE BREEDS OF SHEEP IN QUEENSLAND ON 31ST DECEMBER, 1934; ALSO THE NUMBER OF SHEEP UNDER ONE YEAR, AND ONE YEAR AND OVER, ON THAT DATE.

Pastoral District.	Breeds.				Total Sheep on 31st Dec., 1934.	Ages.		
	Merino.	Pure Breeds other than Merino.	Merino Comeback.	Crossbreeds and *Unspecified.		Under One Year.	One Year and Over.	Unspecified. *
Burke	2,595,243	..	..	249	2,595,492	490,303	2,099,600	5,589
Burnett	244	*a* 291	937	2,926	4,398	1,029	2,630	739
Cook	50	..	61	191	302	50	129	123
Darling Downs	2,460,696	*b* 3,209	88,434	67,639	2,619,978	412,554	2,207,424	..
Gregory North	1,659,484	*c* 13,425	..	..	1,672,909	346,816	1,325,794	299
Gregory South	484,814	..	..	..	484,814	113,963	370,751	100
Leichhardt	1,072,931	..	1,989	2,442	1,077,362	185,874	891,488	..
Maranoa	3,808,212	*d* 419	8,874	1,466	3,818,971	762,587	3,056,384	..
Mitchell	5,610,124	..	560	400	5,611,084	1,304,051	4,307,033	..
Moreton	1,996	*e* 188	435	5,210	7,829	974	4,698	2,157
North Kennedy	505	*f* 30	190	4,861	5,586	612	4,165	809
Port Curtis	7,540	*d* 10,406	667	6,796	25,409	4,547	20,189	673
South Kennedy	256,133	..	..	1,113	257,246	40,234	216,670	342
Warrego	3,388,753	..	..	..	3,388,753	836,212	2,552,064	477
Wide Bay	1,323	..	..	2,726	4,049	333	2,450	1,266
Totals	21,348,048	*g* 27,968	102,147	96,019	21,574,182	4,500,139	17,061,469	12,574
Percentage to Total Sheep ..	98·95	0·13	0·47	0·45	100·00	20·86	79·08	0·06

* Mainly butchers' and ration sheep.

a Corriedale, 282; Dorset Horn, 1; Romney Marsh, 8. *b* Border Leicester, 82; Corriedale, 2,524; Dorset Horn, 53; Leicester, 53; Lincoln, 247; Romney Marsh, 172; South Down, 78; *c* Polwarth. *d* Corriedale. *e* Corriedale, 61; Romney Marsh, 127; *f* Romney Marsh. *g* Border Leicester, 82; Corriedale, 13,692; Dorset Horn, 54; Leicester, 53; Lincoln, 247; Polwarth, 13,425; Romney Marsh, 337; South Down, 78.

Table No. LII.

RETURN SHOWING THE RESULTS OF LAMBING, LOSSES, SHEEP KILLED FOR FOOD ON HOLDINGS, ETC., IN THE SEVERAL PASTORAL DISTRICTS OF THE STATE DURING THE YEAR 1934.

Pastoral District.	Total Sheep as per Stock Returns on 1st Jan., 1934.	Ewes Mated with Rams.	Lambs Marked.	Percentage of Lambing.	Purchases and Transfers.	Sales and Transfers.	Total Losses. *	Killed for Food on Holding.	Total Sheep as per Stock Returns on 31st Dec., 1934.	Skins Obtained. †
Burke	2,676,981	1,361,244	569,002	41·80	268,280	491,099	402,703	24,969	2,595,492	12,290
Burnett	4,161	1,639	1,084	66·14	1,049	1,198	581	117	4,398	92
Cook	538	75	43	57·33	123	314	82	6	302	..
Darling Downs ..	2,543,077	704,323	444,299	63·08	835,231	938,455	225,500	38,674	2,619,978	32,696
Gregory North ..	1,626,633	823,410	392,392	47·65	219,008	381,991	167,469	15,664	1,672,909	13,102
Gregory South ..	432,215	261,139	126,258	48·35	83,075	96,195	54,852	5,687	484,814	3,761
Leichhardt	966,409	351,749	196,684	55·92	167,953	149,578	91,689	12,417	1,077,362	6,552
Maranoa	3,357,087	1,502,695	829,744	55·22	671,868	700,980	285,487	53,261	3,818,971	33,708
Mitchell	5,124,159	2,812,005	1,452,073	51·64	756,408	1,112,441	545,309	63,806	5,611,084	45,550
Moreton	8,372	1,607	1,138	70·82	5,099	4,934	1,229	617	7,829	423
North Kennedy ..	4,684	1,274	631	49·53	1,868	1,163	364	70	5,586	22
Port Curtis ..	27,472	9,415	5,411	57·47	1,773	4,652	4,040	555	25,409	306
South Kennedy ..	218,664	78,474	40,687	51·85	44,925	17,981	26,673	2,376	257,246	1,051
Warrego	3,077,736	1,545,122	919,593	59·52	544,947	875,110	235,627	42,786	3,388,753	33,082
Wide Bay	4,616	515	334	64·85	1,312	1,058	962	193	4,049	221
Totals ..	20,072,804	9,454,686	4,979,373	52·67	3,602,919	4,777,149	2,042,567	261,198	21,574,182	182,856

* For details, *see* Table LIII.

† Year ended 30th June, 1934.

Table No. LIII.

RETURN SHOWING DETAILS OF LOSSES IN SHEEP DURING THE YEAR 1934.

Pastoral District.	* LOSSES AND THE CAUSES AS RETURNED BY OWNERS AND THE PERCENTAGE OF EACH CAUSE TO TOTAL LOSSES.																		TOTAL LOSSES AND PERCENTAGE TO TOTAL SHEEP ON 31ST DECEMBER.			
	Cancer. (Senile Necrosis)		Dingoes.		Drought.		Flood.		Fly.		Lambing.		Old Age.		Shearing.		†Other.		1934.		1933.	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		No.	%	No.	%	No.	%
Burke	8,386	2·08	11,785	2·93	241,300	59·92	6,850	1·70	24,506	6·08	23,838	5·92	52,994	13·16	20,325	5·05	*a*	12,719	3·16	402,703	15·52	254,405	9·50
Burnett	2	0·35	162	27·88	150	25·82	..	..	49	8·43	15	2·58	60	10·33	6	1·03	*b*	137	23·58	581	13·21	738	17·74
Cook	..	..	30	36·58	..	..	..	..	1	1·22	1	1·22	1	1·22	..	..	*c*	49	59·76	82	27·15	180	33·46
Darling Downs	1,342	0·59	13,059	5·79	26,523	11·76	1,913	0·85	32,954	14·61	19,412	8·61	32,778	14·54	24,210	10·74	*d*	73,309	32·51	225,500	8·61	246,627	9·70
Gregory North	3,713	2·22	9,793	5·85	71,506	42·70	3,346	2·00	13,031	7·78	17,098	10·21	33,072	19·75	6,537	3·90	*e*	9,373	5·59	167,469	10·01	214,980	13·22
Gregory South	4,099	7·47	8,048	14·67	14,371	26·20	1,424	2·60	5,549	10·12	4,917	8·96	9,801	17·87	1,942	3·54	*f*	4,701	8·57	54,852	11·31	81,427	18·84
Leichhardt	1,904	2·08	13,535	14·76	11,102	12·11	700	0·76	19,592	21·37	8,620	9·40	19,006	20·73	4,278	4·66	*g*	12,952	14·13	91,689	8·51	160,194	16·58
Maranoa	2,598	0·91	6,256	2·19	82,988	29·07	747	0·26	64,617	22·64	33,869	11·86	49,285	17·26	12,061	4·23	*h*	33,066	11·58	285,487	7·48	473,278	14·10
Mitchell	10,426	1·91	16,849	3·09	246,852	45·27	761	0·14	76,476	14·03	42,173	7·73	116,277	21·32	15,942	2·92	*j*	19,553	3·59	545,309	9·72	993,043	19·38
Moreton	17	1·38	447	36·37	5	0·41	..	..	21	1·71	47	3·82	333	27·10	23	1·87	*c*	336	27·34	1,229	15·70	1,434	17·13
North Kennedy	2	0·55	105	28·85	9	2·47	..	..	20	5·49	42	11·54	56	15·38	2	0·55	*k*	128	35·17	364	6·52	779	16·63
Port Curtis	78	1·93	337	8·34	687	17·01	15	0·37	417	10·32	229	5·67	946	23·42	93	2·30	*l*	1,238	30·64	4,040	15·90	4,547	16·55
South Kennedy	388	1·45	4,517	16·94	6,088	22·82	..	..	3,857	14·46	1,578	5·92	7,448	27·92	1,099	4·12	*m*	1,698	6·37	26,673	10·37	26,720	12·22
Warrego	4,265	1·81	7,363	3·13	63,856	27·10	2,444	1·04	67,905	28·82	31,720	13·46	41,360	17·55	11,401	4·84	*n*	5,313	2·25	235,627	6·95	476,286	15·48
Wide Bay	1	0·11	103	10·71	8	0·83	1	0·10	..	..	11	1·14	54	5·61	..	..	*c*	784	81·50	962	23·76	451	9·77
Totals	37,221	1·82	92,389	4·52	765,445	37·47	18,201	0·89	308,995	15·13	183,570	8·99	363,471	17·80	97,919	4·79		175,356	8·59	2,042,567	9·47	2,935,089	14·62

* Losses of unmarked lambs are not taken into consideration.

† Causes included in "Other"—

a Bogging, heavy rain, marking, poison weed, travelling.
b Dipping, worms.
c Worms.
d Blight, crows, dipping, dogs, foxes, marking, poison weed, travelling, worms.
e Bogging, marking, poison weed, travelling, worms.
f Blight, marking, worms.
g Blight, heavy rain, marking, spear grass, worms.
h Blight, bogging, cold rain, crows, eagles, hawks, marking, poison weed, travelling, wild pigs, worms.
j Bogging, grass seed, marking, poison weed, travelling, worms.
k Grass seed, heavy rain.
l Grass seed, worms.
m Blight, bush fire, crows, domestic dogs, worms.
n Blight, bogging, foxes, marking, poison weed, worms.

Table No. LIV.

RETURN SHOWING NUMBER OF HOLDINGS IN VARIOUS GROUPINGS AND SHEEP THEREON IN THE SEVERAL PASTORAL DISTRICTS AS AT 31ST DECEMBER, 1934.

Pastoral Districts.	1 and under 50 Acres.		50 and under 100 Acres.		100 and under 500 Acres.		500 and under 1,000 Acres.		1,000 and under 5,000 Acres.		5,000 and under 10,000 Acres.		10,000 and under 20,000 Acres.		20,000 and under 50,000 Acres.		50,000 and under 100,000 Acres.		100,000 Acres and upwards.		Travelling Flocks.		Total.	
	Holdings.	Sheep.	Holdings.	Sheep.	Holdings.	Sheep.	Holdings.	Sheep.	Holdings.	Sheep.	Holdings.	Sheep.	Holdings.	Sheep.	Holdings.	Sheep.	Holdings.	Sheep.	Holdings.	Sheep.	No.	Sheep.	Holdings.	Sheep.
Burke	12	83	3	175	3	532	..	..	9	10,142	19	51,250	96	429,492	178	1,006,505	45	582,432	25	512,206	1	2,675	391	2,595,492
Burnett	65	1,130	4	295	13	2,814	2	159	..	..	..	..	..	..	..	..	..	..	..	..	..	..	84	4,398
Cook	8	241	..	..	1	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	302
Darling Downs ..	189	3,145	74	5,036	221	63,567	208	117,449	681	1,004,115	151	542,836	64	417,054	27	370,424	3	92,535	..	..	1	3,817	1,619	2,619,978
Gregory North ..	3	27	1	15	2	270	1	122	1	300	2	2,100	37	114,998	84	412,331	29	302,684	28	840,062	..	..	188	1,672,909
Gregory South ..	..	..	..	..	..	..	..	..	3	1,612	..	..	13	29,392	16	86,981	10	64,875	14	301,954	..	..	56	484,814
Leichhardt	34	612	18	1,053	19	2,556	17	6,576	108	124,274	64	167,615	67	264,792	29	203,742	9	266,242	1	39,900	..	..	366	1,077,362
Maranoa	15	550	23	828	24	4,424	33	13,348	259	335,703	175	463,148	217	837,878	153	969,619	44	548,152	27	645,321	..	..	970	3,818,971
Mitchell	9	126	3	205	3	987	5	1,125	32	29,753	54	112,934	200	767,426	296	1,895,840	89	1,322,899	38	1,467,789	1	12,000	730	5,611,084
Moreton	179	2,722	24	1,359	17	1,117	3	465	1	1,674	1	492	..	..	..	..	..	..	..	..	..	..	225	7,829
North Kennedy ..	15	261	7	569	4	1,108	4	1,860	6	1,788	..	..	..	..	..	..	..	..	..	..	..	..	36	5,586
Port Curtis ..	43	789	12	649	23	2,589	3	561	7	4,217	2	2,700	2	4,804	1	9,100	..	..	..	..	..	..	93	25,409
South Kennedy ..	9	240	..	..	7	1,057	1	138	8	6,224	5	9,616	14	41,876	14	76,502	4	43,800	1	77,793	..	..	63	257,246
Warrego	6	192	1	80	2	308	4	1,240	11	5,054	24	46,404	113	342,063	188	1,006,360	73	683,168	48	1,303,884	..	..	470	3,388,753
Wide Bay	78	1,203	17	886	7	1,960	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	102	4,049
Totals—																								
Holdings ..	665	..	187	..	346	..	281	..	1,126	..	497	..	823	..	986	..	306	..	182	..	3	..	5,402	..
Sheep	..	11,321	..	11,150	..	83,350	..	143,043	..	1,524,856	..	1,399,095	..	3,249,775	..	6,037,404	..	3,906,787	..	5,188,909	..	18,492	..	21,574,182
Average Size of Flocks	17		60		241		509		1,354		2,815		3,949		6,123		12,767		28,510		6,164		3,994	

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